The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1539.—Vol. XXXV. LONDON, SATURDAY, FEBRUARY 18, 1865. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 22 years.)

Holders of mining shares DIFFICULT of SALE in the OPEN MARKET may find purchasers by negociation, through Mr. Crofts' agency. Also, parties requiring ADVICE how to act as to the DISPOSAL, or ABANDONMENT, of doubtful mining stocks may profitably avail of Mr. Crofts' long experience on the market in all cases of doubt or difficulty.

SELECT SHARES FOR SALE, AT LOWEST MARKET PRICES:—25 South Darren, 5s. 6d.; 30 East Vor, 29s.; 50 North Chiverton (lowest market price); 25 Central Mines, 42s.; 15 Great North Laxey, £3; 2 Trelawny, £20¾; 1 Clifford, £31¼; 5 Great Laxey, £19; 50 Bedol-Aur; 30 Crebor (call 1s. paid), 39s. 9d.; 50 Wh. Union, 13s. 6d.; 5 Moelwyn Slate (£4 paid), £3¼; 10 East Russell, £4 11s. 3d.; 15 North Basset, 20s. 9d.; 20 East Lovell (at the fall in price); all net.

SPECULATIVE SHARES AT NOMINAL PRICES:—50 Wheal Hope, 8s. 6d.; 5 Tolvadden, 7s. 6d.; 25 Unity, 4s. 9d.; 20 New East Birch Tor and Vitifer (an offer); 100 Prince of Wales, 1s. 10d.; 50 North Robert, 14s. 6d.; 45 Vale of Towy, 2s. 9d.; 8 Redmoor (an offer); 35 Sortridge Consols, 3s. 3d.; 50 Wheal Hartley, 7s. 4d.; 5 St. Ives Allen (very cheap), 12s. 3d.; 50 Great South Chiverton (an offer): all net.

*** BUYER of Devon and Cornwall United. State number and price.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

James Lane has FOR SALE at nett prices:—5 Basset and Grylls; 20 Bryntail, £2¼; 50 Crebor, 39s.; 25 Carn Camborne, 25s.; 50 Dale, 10s. 6d.; 10 East Lovell; 10 East Rosewarne, £2 15s.; 2 East Basset, £30; 20 East Russell, £4⅞; 20 East Wheal Vor, £2; 10 Frank Mills, £6⅞; 20 Great Wheal Busy, £1⅛; 10 Great Wheal Vor, £34¼; 50 Gothic, 37s. 6d.; 50 Great North Laxey, £3; 5 Great Laxey, £18¾; 20 Hallenbeagle, £3¾; 20 Kelly Bray; 20 Lady Bertha, 12s. 6d.; 10 Maudlin, £6¼; 25 North Treskerby, £2½; 6 North Basset; 50 North Devon, 32s. 6d.; 20 New Wheal Martha, £1¼; 25 New South Caradon, 5s.; 50 Pedn-an-drea; 20 South Lovell, £2¼; 20 South Darren, £2½; 100 Vale of Towy, 2s. 6d.; 100 Silver Mountain, 4s.; 50 Unity, 5s.

MR. WILLIAM LELEAN (Member of the Mining Exchange), has FOR SALE the FOLLOWING SHARES, at nett prices:—

10 Bedford United, £2⅜.
50 Bedol-Aur, 15s.
20 Camborne Vean, 22s.
5 Clifford Amal., £30¼ (ex div.)
10 Chiverton, £6½.
5 Cook's Kitchen, £8⅞.
15 Chiverton Moor, £2¾.
30 Carn Camborne, 21s. 9d.
25 Drake Walls, 12s. 6d.
10 East Carn Brea, £6 8 9
30 East Grenville, £4 9s.
25 East Laxey, 35s.
20 East Snaefell, £2 2 6
10 East Treskerby, £2.
50 East Providence, 15s.
10 East Russell, £4 4s.
3 East Basset, £38.
5 East Caradon, £18¾.
5 East Lovell, £10¼.
25 East Rosewarne, £2 3 9
50 Garlidna, 15s. 6d.
10 Great Laxey, £18.
50 Great North Laxey.
85 Grylls Florence, 12s.
5 Gonamena, £2 18s. 9d.
5 Great Fortune, £4½.
100 Great Retallack, 1s. 3d.
50 Great South Chiverton.
10 Great Wheal Busy, 25s.
50 Kelly Bray, 6s. 3d.
40 Lady Bertha, 8s. 9d.
10 Maudlin.
5 Marke Valley, £5 3s 9d
20 Nth. Treskerby, £2 3 9
10 Nangiles, £16¾.
25 New Clifford, 25s.
5 New Rosewarne, £5¾.
20 New Wh. Martha, 23s.
10 No. Chiverton, 42s. 6d.
25 North Downs, 5s. 6d.
100 North Robert, 10s.
5 North Roskear, £15.
20 North Crofty, £2 3s. 9d
30 North Devon, 27s. 6d.
10 Pendeen, £2.
100 Prince of Wales, 2s. 6d.
2 Providence, £33¾.
5 Rosewall Hill, 35s.
50 Rosewarne Consols, 15s.
25 St. Day United, 15s 6d.
150 Sortridge, 1s.
20 South Darren, £2½.
15 Silthney Metal, £2 2s. 6d.
30 Snaefell, 17s. 6d.
20 South Basset, £6 10s.
5 South Carn Brea, 10s.
30 So. Condurrow, 38s. 6d.
3 Stray Park, £15¾.
5 Tincroft, £15⅜.
5 Trelawny, £19⅞.
5 Tresavean, £4¼.
50 Treweatha, 2s. 6d.
100 Vale of Towy, 3s. 6d.
3 West Chiverton, £65.
15 West Caradon, £7¼.
50 Wheal Ludcott, 8s. 6d.
25 Wheal Unity, 5s.
10 Wheal Uny, £2 3s. 9d.
10 Wh. Mary Ann, £13¼.
5 Wheal Margaret, £7¼.
20 Wheal Crebor, 38s. 6d.
15 Wheal Edward, 4s. 6d.
25 Wh. Grenville, £2 16 3
20 Wheal Grylls, £2.
50 Wheal Hope, 10s.
50 Wheal Harriett, 5s. 6d.

Mr. Lelean BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER. Parties may rely upon him for sound advice and punctuality in all his engagements.

My Presentation Almanack may be had on application.

I refer my correspondents to my remarks in page 104 of this day's Journal, as also to notice of Maudlin Mines in last week's Journal, page 92.

N.B.—SPECIALLY RECOMMENDED, the immediate purchase of Maudlin shares.

I annex the following from the *Mining Journal* of Feb. 4:—

Maudlin Mines.—The rich discoveries still continue, and are of the most satisfactory character for the evidences they afford of the great extent of the rich lode of copper ore they discovered seven or eight weeks since. They have not only again cut into this ore in driving the 70 east, after having been interrupted by the gossan, but they have come upon it in cutting in south from the same level west, where it is running back behind the level towards the greenstone. Hence it would appear that the shaft now being sunk is going down right into an immense deposit of unusually rich copper ore, which may be met with at any moment, and which must, when reached, greatly enhance the value of the shares.

Bankers: Messrs. Robarts, Lubbock, and Co.

Offices, 11, Royal Exchange, London, E.C.

MR. HENRY BULLEN, MINE SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

MR. G. D. SANDY, SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C. (Member of the Mining Exchange), has SPECIAL BUSINESS in the following shares:—

Bedol-Aur.	Great South Tolgus.	Redmoor.
Bottle Hill.	Great Vor.	Stray Park.
Bryntail.	Great South Chiverton.	Sortridge Consols.
Bedford United.	Great Laxey.	Silthney Metal.
Carn Camborne.	Hallenbeagle.	St. Day United.
Crane.	Herodsfoot.	St. Ives Wheal Allen.
Chiverton.	Kelly Bray.	So. Caradon Wh. Hooper.
Drake Walls.	Lady Bertha.	South Condurrow.
East Chiverton.	New South Caradon.	Tremayne.
East Laxey.	North Chiverton.	Tolvadden.
East Rosewarne.	North Devon.	Trelawny.
East Lovell.	North Shepherds.	Wheal Grylls.
East Russell.	North Treskerby.	Wheal Harriett.
East Vor.	North Downs.	Wheal Hartley.
East Carn Brea.	North Crofty.	Wheal Unity.
East Grenville.	Iligan Consols.	Wheal Crebor.
Great Retallack.	Prince of Wales.	Wheal Grenville.

A selected list of shares certain to have a considerable rise during the present year forwarded on application.

Current Daily Price List as usual.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 12, THROGMORTON STREET, LONDON, E.C., is in a position to give sound advice as to the sale or purchase of mining shares, the present being one of the most favourable opportunities for speculation or investment to result in large profits. List free on application.

FOR SALE:—20 Rosewarne United, 25s.; 4 Wheal Margaret, £8¼; 10 Minera Union (dividend), £15.

BUYER of Chiverton and Central Minera.

*** SPECIAL BUSINESS in Great North Laxey.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C., STOCK AND SHAREDEALER.
(Established Eleven Years.)

FOR SALE:—75 North Chiverton, £2; 10 East Carn Brea, £6⅜; 2 Clifford, £31⅛; 30 Drake Walls, 13s. 9d.; 2 East Basset, £29¼; 50 East Laxey; 20 East Rosewarne, £3¼; 10 Frank Mills, £6 11s. 3d.; 8 Great Fortune, £4 8s. 9d.; 10 East Russell, £4¼; 30 Great So. Tolgus, £2 1s. 3d.; 20 Hallenbeagle, £3¼; 15 Hingston Down, £3 13s. 9d.; 50 Kelly Bray, 10s. 3d.; 40 Lady Bertha, 7s. 3d.; 35 North Downs, 5s. 3d.; 10 North Treskerby, £2¼; 70 Redmoor, 3s.; 80 St. Day, 15s. 3d.; 2 Stray Park, £14¾; 120 Vale of Towy, 2s. 3d.; 45 Crebor, 37s. 9d.; 15 Harriett, 5s.; 150 Prince of Wales, 2s. 3d.; 100 Merilyn (offer wanted); 5 East Lovell, £10 7s. 6d.; 50 Wheal Unity, 4s. 9d.; 5 Cwm Erfin, £40¼.

MR. WALTER TREGELLAS, 3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C., has BUSINESS in the FOLLOWING MINES:—Santa Barbara, Frontino and Bolivia, Montes Aureos, Great Vor, North Shepherds, East Caradon, and North Roskear. These shares are strongly recommended for investment at present low prices.

FOR SALE:—50 Prince of Wales Slate, £3¼; 20 Princess of Wales, £5½; 50 East Snaefell, £3¼; 100 Montes Aureos, 15s. 6d.

**MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 17 years), has FOR SALE at nett prices:—100 Okel Tor, 22s. 6d.; 50 Wheal Unity, 5s. 3d.; 1 Minera, £392¼; 50 East Rosewarne, £2½; 50 Great North Laxey, £3; 5 Billins, £8¾; 25 East Grenville; 75 Santa Barbara, 13s. 6d.; 100 Welsh Gold, 16s.; 50 Kelly Bray, 11s. 6d.; 75 Frontino and Bolivia (20s. paid), 31s. 6d.; 100 South Grenville, 8s.; 7 Wentworth Consols, £8¼; 150 East Seton; 20 Maudlin; 6 Wheal Trelawny, £20; 60 Silthney Metal, £2¼; 50 Alamillos, 36s.; 1 South Caradon; 30 Quebrada (£6½ paid), £3¼; 250 Iligan, 7s. 6d.; 70 Great South Chiverton, 14s.; 10 Great Vor; 100 Nova Scotia Gold, 17s. 6d.; 120 Don Pedro; 50 Pedn-an-drea; 60 Bottle Hill; 30 Rosewarne United; 35 North Pool, 20s.; 20 Wheal Grenville, £2 18s. 9d.; 10 North Crofty, £1⅜; 125 Merilyn, 3s.; 110 South Grenville, 8s.; 50 South Condurrow; 70 Wheal Hartley; 25 Great Devon and Bedford; 200 Anglo-Brazilian; 150 Dun Mountain; 50 Worthing; 20 Cape Copper.

GREAT NORTH LAXEY (LIMITED).—Mr. PETER WATSON strongly recommends this mine to his friends and the public, at the present low price of £3 to £3½.

N.B.—The mine this week has improved.

79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—Mr. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.

Twenty years' experience.

(Two in Cornwall and Eighteen in London.)

Bankers: The Union Bank of London, and the Alliance Bank.

Every information can be obtained on personal application, or by letter, as to purchases and sales of Mine, Railway, Bank, and other Shares and Stoks, and the best investment for capital.

From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, Peter Watson is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality.

PETER WATSON'S WEEKLY MINING CIRCULAR AND SHARE LIST, published every Friday, price 6d. each copy, forwarded on application. This Circular contains weekly important information with respect to all the principal Dividend and Progressive Mines in Devon and Cornwall. Annual subscription, £1 1s.; single copy, 6d.

79, Old Broad-street, London, E.C.

ADVERTISING SHARES AT FIXED PRICES.—On the front page of last Saturday's impression of the Mining Journal appears a blatant tirade against advertising shares with prices affixed, from the pen of a self-appointed censor of the Stock Exchange. Daily increasing patronage is the most convincing proof that the publice appreciate a system, which is in fact their principal safeguard against being deceived into purchasing worthless shares at enormously high prices.

Mr. Herron's list will continue to appear, and he will spare no effort to render it the best criterion of the market value of mining property.

MR. HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

50 Anglo-Brazilian, 5s. 3d.
100 Bedol-Aur.
5 Bryn Gwiog.
20 Carn Camborne, 21s. 3d.
10 Clifford Amal., £30¼.
5 Cobre.
20 Chiverton, £6 2s. 6d.
20 Camborne Vean, 26s. 9d.
5 Clijah & Went., 37s.
20 Crowan Consols (offer wanted).
10 Cape Copper, £11⅜.
15 Crosier Valley and Port Madoc, £2 2s. 6d.
5 Cwm Erfin, £40.
10 Drake Walls, 10s. 9d.
100 Don Pedro.
1 East Basset, £29¼.
5 East Carn Brea, £6⅜.
10 East Russell, £4 6s. 9d.
5 East Lovell, £10.
10 E. Rosewarne, £2 2s. 6d.
20 East Vor, £1 16s. 6d.
20 East Grenville, £4 7s 6d.
20 East Laxey.
5 East Caradon, £14.
10 East Grylls.
30 East Abraham.
10 Frank Mills.
50 Frontino & Bolivia, 28s 9d
50 Great Grylls, 4s. 9d.
10 Gt. So. Tolgus, £2.
100 Gt. Northern Copper, 1s. (call paid).
5 Great Wh Vor, £34.
5 Great Laxey.
50 Great North Laxey.
20 Great North Downs.
30 Grylls Florence.
50 Gt. South Chiverton.
20 Hallenbeagle, £3 3s. 9d.
1 Herodsfoot, £35.
10 Hingston Down.
20 Kelly Bray, 12s.
40 Mariquita, 15s.
20 Mineral Bottom, £5⅛.
10 Maudlin.
50 New Birch and Vitifer, £1 17s. 6d.
20 North Basset, 18s.
10 North Pool, 24s.
50 North Devon.
5 No. Wh. Crofty, £2¼.
5 New Rosewarne, £5¾.
10 New Clifford, 36s.
10 North Jane, 16s.
1 North Roskear, £16.
10 North Treskerby.
20 North Chiverton, 41s.
5 New Wendron.
50 New East Birch Tor.
40 Pedn-an-dren, 10s.
1 Providence, £33¼.
50 Port Phillip, £1⅜.
20 Quebrada (free), £6¼.
40 Redmoor, 3s.
1 West Chiverton, £64¼.
5 Stray Park, £17⅛.
50 Santa Barbara, 14s. 9d.
50 South Caradon Hooper.
35 St. Day United, 16s.
5 St. John d. Rey.
20 South Darren, 48s. 3d.
20 Snaefell.
20 So. Wh. Leisure.
25 South Lovell, £2 1s. 9d.
10 Tincroft, £15 8s. 9d.
1 Trelawny, £19½.
10 Tresavean, £5¼.
50 Treweatha, 5s. (call pd.)
20 United Mex., £5 1s. 3d.
20 Vale of Towy, 2s. 6d.
1 West Chiverton, £64¼.
20 Wheal Grylls, £1 18s 9d
1 Wheal Seton, £194.
5 West Caradon, £7 7s. 6d.
2 West Tolgus, £59⅛.
1 West Sharp Tor.
20 Wh. Grenville, £2 17 6.
20 Worthing, 14s. 9d.
20 Wheal Crebor.
20 Wh. Ida (offer wanted).
5 Wentworth, £8¼.
20 Wheal Agar, £2.
10 Wheal Curtis.
20 Wheal Uny, £2 8s. 9d.
50 Welsh Gold, 16s. 6d.
50 Yudanamutana.

And is a BUYER of 120 Rosewarne United, 40 Hingston Down, 50 Quebrada, 5 Nangiles, and 20 Wheal Uny shares.

There are several dividend and progressive mines that are now selling at very depressed prices, the shares in which must shortly considerably advance. Mr. Herron will be happy to forward a carefully-selected list to parties wishing to invest.

Mr. Herron can strongly recommend, as an unusually safe investment, a certain railway and two joint-stock banks, and will forward particulars upon application.

2, Adam's-court, Old Broad-street, February 17, 1865.

MR. THOS. THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.

WILLIAM SEWARD, 19, THROGMORTON STREET, LONDON, E.C.

HARRIS AND CO., STOCK AND SHAREBROKERS, AND FINANCIAL AGENTS, 15, GEORGE STREET, MANSION HOUSE, LONDON, E.C.

MR. J. B. REYNOLDS, 2, HATTON COURT, THREADNEEDLE STREET, E.C.

Great North Laxey (Limited).—BUYER at £3, cash or time. These shares should be bought, as they are likely to have a good rise. Every probability of the mine doing well.—February 17, 1865.

JOSEPH J. REYNOLDS, Jun., 37, OLD BROAD STREET, LONDON, E.C.

Mr. Reynolds recommends for immediate purchase shares in Roskearnoweth and East Ellen Mines, being confident that a rise in price equal to cent. per cent. will soon take place. Shares can now be obtained at about £1 per share in each mine.

MR. EDWARD COOKE, MINING SHAREDEALER, 2, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C. (Member of the Mining Exchange.)

Mr. Edward Cooke has removed to the above address, where all communications on matters relating to business will meet with his usual attention.

Great North Laxey (Limited).—Mr. Edward Cooke having secured a limited number of shares in this mine, will be glad to receive applications.

Feb. 17, 1865. Bankers: Alliance Bank, Lothbury.

MR. C. POWELL, MINE SHAREDEALER. 78, OLD BROAD STREET, LONDON, E.C. (Member of the Mining Exchange.)

Mr. Powell begs to inform his friends and the public that he TRANSACTS BUSINESS, as BUYER or SELLER of SHARES in MINES, at close nett prices, either for cash or the fortnightly settlement.

Mr. Powell continues to recommend the Frontino and Bolivia (South American) Gold Mining Company's shares for investment. Present price 27s. 6d. to 30s. (£1 paid). The immense gold-yielding resources of these mines are being rapidly developed under the superintendence of Capt. W. Goyen (late of the St. John del Rey Company's Mines), whose abilities as a practical gold miner are indisputable. The directors (who hold about one-quarter of the shares) are gentlemen of high standing, and the shares generally are well held.

Mr. Powell is a BUYER or SELLER of these shares, and is prepared to make a close price to parties having business in them, either for cash or the fortnightly settlement.

Feb. 17, 1865. Bankers: City Bank, Finch-lane.

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodsfoot, South Caradon, Devon Great Consols, Great Wheal Vor, Wentworth Consols, and Silthney Wheal Metal for investment. These shares will pay good interest for money at present quotations.

Advertisements have recently been inserted in the columns of the Mining Journal by dealers who, having sold shares for forward delivery, endeavour to frighten timid holders in order to possess themselves of their shares to fulfil their contracts; this system has been adopted particularly against Great Wheal Vor, West Chiverton, and Chiverton shares, and I caution my friends against parting with their property, or giving credence to the unfounded assertions of interested parties.—76, Old Broad-street, London, E.C.

JAMES HUME, 74, OLD BROAD STREET, LONDON, E.C., AND MINING EXCHANGE.

BUYER of South Condurrow, 35s.; East Grenville, £4¼; Wheal Uny, £2; North Basset and Union; Stray Park, £14; Great Vor, £33¾. A dealer also in all market mines at closest prices.

South Condurrow.—Mr. Hume recommends this mine from 7s. per share upwards. The shares have not yet began to rise.

New Wendron.—Mr. Hume also recommends this mine at the present low prices, and on the same principle that he recommended South Condurrow from 7s.; East Carn Brea at £6, previous to these shares going to £20; East Caradon at £6, which rose to £55; East Lovell at £3½, which rose to £22, &c.

Bankers: London Joint-Stock Bank.

MR. T. P. THOMAS, GENERAL SHAREBROKER, AND AUCTIONEER FOR THE SALE OF MINING, RAILWAY, AND OTHER SHARES, STOCKS, BONDS, DEBENTURES, And all descriptions of Public Securities.
No. 6, NEW BROAD STREET, LONDON, E.C.
Shares bought and sold on the usual commission.
Terms for sale of shares by auction furnished on application.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 37, OLD BROAD STREET, LONDON, E.C.

Mr. Thomas has in course of preparation a pamphlet relating to mining investment and speculation at the present time, which will shortly be published, price 1s.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE, LONDON, E.C., has the following SHARES FOR SALE, free of commission:—

10 Bryn Gwiog, £17¼.
25 Caradon Vale, 3s. 6d.
50 Carn Camborne, 24s.
50 Cefn Cilcen, 10s. 3d.
5 Clifford, £30⅝.
15 Dale, 8s.
20 East Jane, 25s.
50 East Abraham.
10 East Lovell, £10¼.
20 East Caradon, £14¼.
25 East Grenville, £4 8s.
20 E. Carn Brea, £6 8 9
14 East Rosewarne, 43s.
10 East Wh. Vor, 35s. 3d.
4 East Basset, £30.
50 Frontino and Bolivia (Gold), 29s.
10 Frank Mills, £6 17s.
10 Great Laxey, £17¾.
10 Gt. Wh. Vor, £34½.
20 Grylls Wheal Florence, 19s.
20 Hingston Down, £3 18 3
50 Lady Bertha, 8s. 9d.
100 Llanberis Slate, 20s 3d
10 Marke Valley, £5 8s.
50 New Birch Tor, £2¼
50 New Wh. Martha, 26s.
5 Nangiles, £17.
10 New Rosewarne, £3.
20 North Minera, 2s.
5 North Shepherds, £2¾
15 North Grambler, 12s.
50 North Downs, 5s. 6d.
50 No. Treskerby, £2 6s 3d
50 Prince of Wales, 2s 9d.
20 South Darren, 45s.
20 So. Condurrow, 37s. 6d.
50 St. Day United, 16s. 9d.
25 St. Just United, 19s 6d.
10 Stray Park. £18.
50 Vale of Towy, 2s. 3d.
50 West Wh. Vor, 23s.
40 Wheal Crebor, 38s. 9d.
40 Wheal Grenville, 56s 9d
50 Wheal Harriett, 8s. 9d.
30 West Maria and Fortescue, 39s.
75 Sortridge Consols, 2s.
50 Wheal Hope, 7s. 6d.

BUYER of East Caradons, at £14; 50 Quebrada, £3⅛; Frontino and Bolivia, 26s.; 100 Drake Walls, 8s.; and New Wheal Martha, 21s.

Parties of respectability can have transfers registered into their names previous to payment. Bankers: London and County Bank.

Great North Laxey Mine.—Mr. F. G. Lane can give full particulars of this important mine. By the official report received this week, it will be seen that the lode in the shaft is worth in the north end full 2 tons of lead ore per fathom; the ore dipping north, as all the large bunches in Great Laxey do. The 60 end has much improved, being valued at 1 ton of lead ore per fathom, besides blende. Mr. Lane can dispose of a few shares at £3 nett per share, if applied for early.

GREAT DEVON AND BEDFORD (COLCHARTON) MINE.
Capt. James Seccombe has inspected this important property.
Mr. F. G. Lane will forward a copy of his report on receipt of 5s.
2, Royal Exchange, London, E.C.

Established Twelve Years.

HENRY GOULD SHARP, 32, POULTRY, LONDON, E.C., TRANSACTS BUSINESS in BRITISH and FOREIGN STOCKS and SHARES of EVERY marketable DESCRIPTION, at the CLOSEST PRICES of the day. Member of the Mining Exchange.—Bankers: London and Westminster.

JOHN R. PIKE has received instructions to SELL the undermentioned SHARES, at the prices quoted, FREE OF COMMISSION:—

50 Carn Camborne, £1 1 3
50 Camborne Vean, £1 1 3
15 Cook's Kitchen, £8 15s.
100 Bryntail, £2 10s.
75 East Ellen, 17s. 6d.
20 East Caradon.
25 East Carn Brea, £6 8 9
30 East Lovell, £10 10s.
50 East Russell, £4 5s.
50 East Vor, £1 16s. 3d.
25 East Treskerby, £1 18 3
50 Great North Laxey, £3.
30 Gt. So. Tolgus, £2 0s 6d
10 Great Vor, £34.
25 Grylls Wheal Florence, 18s. 3d.
15 Frank Mills.
20 Hingston Down, £3 18 3
50 Camborne Vean, £1 1 3
50 Hallenbeagle, £3 5s.
100 Lady Bertha, 7s. 3d.
20 Long Rake, £1 1s. 3d.
10 Marke Valley, £5 1s 3d
30 Maudlin.
50 North Chiverton, £2.
10 No. Roskear, £15 15s.
10 Nangiles, £15 12s. 6d.
100 Nant-y-Iago, 10s.
20 New Wendron, £2 2 6
100 North Downs, 7s.
25 North Dolcoath, 17s. 6d
40 No. Shepherds, £2 6 3
20 North Basset, 17s. 6d.
35 Prosper Untd., £3 3 9
10 Silthney Metal, £2 2 6
5 Stray Park.
20 Sithney Carnmeal.
15 Tincroft, £15 10s.
100 Redmoor, 2s. 9d.
100 Prince of Wales, 2s. 9d.
20 Wheal Agar, £2.
10 Wheal Curtis.
20 Wheal Uny, £2 8s. 9d.
50 Welsh Gold, 16s. 6d.
50 Yudanamutana.
20 So. Condurrow, 37s. 6d.
50 St. Day United, 16s. 9d.
25 St. Just United, 19s 6d.
10 Stray Park. £18.
50 Vale of Towy, 2s. 3d.
50 West Wh. Vor, 23s.
20 South Darren, 48s. 3d.
20 Snaefell.
20 So. Wh. Leisure.
25 South Lovell, £2 1s. 9d.
10 Tincroft, £15 8s. 9d.
1 Trelawny, £19½.
10 Tresavean, £5¼.
50 Treweatha, 5s. (call pd.)
20 United Mex., £5 1s. 3d.
20 Vale of Towy, 2s. 6d.
1 West Chiverton, £64¼.
20 Wheal Grylls, £1 18s 9d
1 Wheal Seton, £194.
5 West Caradon, £7 7s. 6d.
2 West Tolgus, £59⅛.
1 West Sharp Tor.
20 Wh. Grenville, £2 17 6.
20 Worthing, 14s. 9d.
20 Wheal Crebor.
20 Wh. Ida (offer wanted).
5 Wentworth, £8¼.
20 Wheal Agar, £2.
10 Wheal Curtis.
20 Wheal Uny, £2 8s. 9d.
50 Welsh Gold, 16s. 6d.
50 Yudanamutana.
20 Sithney Carnmeal.
15 Tincroft, £15 10s.
100 Redmoor, 2s. 9d.
100 Prince of Wales, 2s. 9d.
Mining and Financial (offer wanted).
3 West Tolgus, £61.
2 W. Seton, £200(ex.div.)
20 Wh. Grenville, £2 17 6
2 Wheal Seton, £195.
4 Wheal Trelawny, £20.
7 Wheal Clifford, £30 15s. (ex. div.)
5 West Chiverton, £64.
100 Wheal Unity, 4s. 9d.
50 North Robert.

Mr. Pike requests that shares forwarded to him for advertisement may not be later than Friday morning of each week.

"Britain's Metal Mines."—Every shareholder in British mines should possess himself of this book, which forms a complete guide to the investor. One shilling, or free by post for thirteen stamps.—3, Pinner's-court, Old Broad-street, London.

NOTICE TO SHAREHOLDERS.

GARLIDNA UNITED.—WANTED TO PURCHASE, ONE HUNDRED SHARES in this mine, all calls paid.—Sellers will please state number and lowest price to Mr. Curtis, 22, Harriet-square, Kingsland-road, London, N.

WILLIAM WARD, 29, THREADNEEDLE STREET, LONDON, E.C.

GEORGE RICE, 5, COWPER'S COURT, BIRCHIN LANE, LONDON, E.C. (23 years' experience), Member of the Mining Exchange. Money advanced on mining shares.

Feb. 17, 1865. Bankers: Bank of London.

MESSRS. WARD AND JACKMAN, 2, ADAM'S COURT, OLD BROAD STREET, AND MINING EXCHANGE, LONDON, E.C. Bankers: London and Westminster, Lothbury.

WILLIAM BARTLETT, MINING SHAREDEALER, No. 2, BUCKLERSBURY, LONDON, E.C. (Member of the Mining Exchange),

Receiving early information of improvements in mines is in a position to give sound advice as to what should be bought for a great rise in price within the next few months. Mines inspected by experienced and trustworthy agents.

Telegrams promptly attended to.

Cheques sent by post should be made payable to my order, and crossed "Alliance Bank."

FOR SALE, EACH NETT:—

25 Long Rake, £1½.	5 Kitty (Lelant), £8½.	5 W. Stray Park	offers wanted.
100 Iligan Consols, 3s. 6d.	1 East Basset, £28½.	3 Wendron Con.	
3 Mary Ann, £13.	10 Wh. Emma (Buckfastleigh), offer wanted.	3 North Frances	
25 E. Providence, 12s. 6d.			

Apply to John W. Hutchinson, Mining Exchange, Royal Exchange Avenue, E.C.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Bronfloyd, £4⅞.	Great Laxey, £18.	North Buller, 18s.
Birch Tor & Vitifer, 35s.	Great So. Tolgus, £2½.	Rosewarne Utd., £1⅜.
Chiverton, £6½.	Great Vor, £34½.	South Condurrow, 37s.
East Carn Brea, £6 8s 9d	Glasgow Caradon, 37s.	Stray Park, £17½.
East Grenville, £4¼.	Hallenbeagle, £3⅜.	South Tolgus, £24.
East Russell, £4¼.	Hingston, £3¾.	Tresavean, £4¼.
East Basset, £30.	Kelly Bray, 10s.	Vale of Towy, 3s.
East Gunnislake, 12s. 6d.	Lady Bertha, 8s.	West Chiverton, £64.
East Caradon, £14⅜.	North Treskerby, £2⅜.	West Caradon, £7¼.
East Vor, £1 15s.	North Downs, 7s.	Wheal Seton, £195.
Frank Mills, £6 8s. 9d.	North Robert, 10s.	Wheal Grenville, £2⅞.

And is a BUYER of:—

Rosewarne United, 20s. Wheal Edward, 3s. East Gunnislake, 10s.

And is a SELLER, for time on, of the following shares, below present market prices:—

Chiverton. Great Wheal Vor. East Grenville.
Great North Laxey. West Chiverton. Frontino and Bolivia.

February 17, 1865. Bankers: Bank of London.

MATTHEW GREENE, STOCK AND SHAREDEALER, 9, GRACECHURCH STREET, LONDON.

Mr. Greene has FOR SALE the following shares:—

20 E. Rosewarne, £2 3s. 9	10 East Laxey, 40s.	10 N. Treskerby, £2½.
20 East Grenville, £4½.	5 East Lovell, £10¼.	10 Reinnle Laxey, £4¼.
20 Crebor, 39s.	5 East Caradon, £14¼.	

And is a BUYER of—New Clifford and Great Laxey for cash.

Gentlemen can have shares registered before payment if buyers, and if sellers cash on receipt of transfer.

Great Wheal Fortune.—Although there has been little or nothing said concerning this mine for some time past, I would recommend my friends and clients not to lose sight of Great Wheal Fortune, as from the geological character of the locality, and its proximity to Great Wheal Vor (the strata being identical with the last-mentioned great mine), the shareholders have good reason to anticipate profitable and lasting results.

Bankers: Imperial Bank, Lothbury.

Original Correspondence.

LADDER CLIMBING FROM DEEP MINES FATALLY INJURIOUS—No. III.

Sir,—Though there is, and, perhaps, always will be, great difference of opinion as to which of the two monster mischiefs of mining, bad ventilation or long climbing, kills most men, there is none amongst those most competent to judge that each has slain its thousands. As both, therefore, ought to be reduced to the lowest practicable amount, it is of no great consequence to which we attribute most of the evil, provided that in our eagerness to combat one we do not allow the other great evil to be lost sight of. This is what some, in their laudable anxiety thoroughly to condemn the evils of bad ventilation, have done, by attributing all, or nearly all, the mischief to that one cause, forgetting, some even denying, that the sufferings produced by excessive climbing are to those forced to endure them often as bad, sometimes worse, than even those arising from bad ventilation, including not only the breathing of bad air, with deficiency of vital gas and excess of choke-damp, but what is still worse, loaded with moisture charged with poisonous animal exhalations, and, moreover, hot and damp, as well as close and poor. Frequently also filled with powder smoke, candle fume, and sharp irritating dust. Such are the inevitable consequences of bad ventilation, and, therefore, a very large part of the excessive disease and mortality must be attributed to it; but however strongly we may perceive and express that important truth, let us be careful not to under-estimate the evils of excessive climbing, and thereby give the smallest encouragement to the continuance of that suicidal practice.

That the practice is suicidal is in effect affirmed by the united testimony of the miners themselves, of their medical attendants, and of most scientific enquirers, who have made careful examination of the facts. As the Commissioners say, "The evidence of the medical witnesses, and of the miners themselves, leaves no doubt on our minds as to the pernicious effects of severe climbing." I do not understand how anyone can doubt it, especially after considering the sort of evidence offered in opposition to the conclusion alike of personal experience, medical observation, and scientific authority. There is, in fact, no real evidence in opposition, and the only statements that look like evidence are these two. First, it is asserted, though not correctly, that miners who do not climb suffer as much from miners' consumption as those who do; and, secondly, that men who climb ladders as much or more than miners do not suffer as they do from excess of lung disease. If the assertions were correct they would not sustain the inference that climbing does not greatly injure miners who do climb much, unless it were also proved that those who do not climb, but nevertheless do suffer much from lung disease, both suffer as much from it, and are not more exposed than the others are to other well-known causes of the disease; whilst it must also be proved that classes of men who climb ladders much without evidently suffering from it, climb in the same manner as Cornish miners do, who say they suffer from it very severely. "Those who wear the shoe know best where it pinches."

The statement is not correct that miners who do not climb suffer nearly as much from lung disease as those who do. It is not correct that the Northern miners, even as a whole, suffer as much as Cornish miners do, although many of the latter do not climb injuriously, and many of the former are much more exposed to other well-known and powerful causes of lung disease, as I explained in my letter in the Journal of Jan. 21. Dr. Peacock, for example, reported that he found about twice as many in proportion amongst the Cornish as amongst the Northern miners either ailing or decidedly delicate. "I was much struck," he says, "on visiting the northern mining districts with the more robust character of the men that I found at work at the different mines, and with the larger proportion of middle-aged and old men amongst them." There appears to be, it is true, a greater excess of fatal lung disease among the younger Northern miners, but the excess among miners aged above 55 is much greater in Cornwall than in the North. It is, however, very misleading to compare for this purpose the death rates of the Northern miners with that of the whole of the Cornish miners, for a very large proportion of the latter do not climb injuriously, either because they work in shallow mines, or in deep ones from which they are raised by the man-engine or otherwise. If a comparison could be made between the death rates of Cornish miners who do and who do not climb, which would be the only fair comparison, the result would, I doubt not, be most startling; but, unfortunately, that comparison cannot be fairly and fully made, for miners frequently change their place of employment, and there is evidently a very strong inducement for those whose health is failing, and who cannot climb without unusual distress, to seek work in shallow mines, or where the man-engine is used, and all changes from such motives will tend to raise the death rate at the mines where there is little climbing, and lower it where there is much, above and below the truth. Notwithstanding this evident strong tendency of a man-engine to attract to a mine where it is used, men whose health is failing, and who, therefore, cannot climb, Dr. Taylor, the experienced surgeon of the Fowey and Par Consols Mines, where the man engine has been long in use, tells us that he has been attending miners for 24 years, that during the earlier portion of that period there was a great deal of sickness, a great deal of heart disease and of consumption, but of late years it has very much decreased, and that he attributes the decrease entirely to the substitution of the man-engine for ladders. He subsequently somewhat qualified this estimate, and said that he attributed the improvement in the miners' health "principally to the use of the man-engine;" and no doubt an important, though comparatively but a small, part of it has been produced by other improvements, especially by better protection of the men from cold on reaching the surface. Dr. Taylor's experience thus confirms the late Dr. Carlyon's wise prediction, made when the man-engine was first proposed, that "If it be found practicable to raise the miner from deep mines by any of the ingenious contrivances that have been lately recommended, there cannot be a doubt that such an invention would confer on him the greatest benefit, by removing the principal cause of disease." I think "one of the principal" would have been a more accurate expression; but Dr. Carlyon's is a high authority.

Mr. G. A. Mitchell, surgeon of the Gwennap Mine, states that there also "Pulmonary and Cardiac disease are certainly of less frequent occurrence than before the introduction of the man-engine. Climbing," he says, "from deep mines is undoubtedly the severest part of his (the miner's) employment, and very probably told more on his constitution than anything else connected with his occupation." I might go on quoting opinion after opinion, citing fact upon fact, to the same effect, were not your space and your readers' patience alike limited. I need not encroach further on either, further than to reply shortly to the other argument, for those who are not already convinced that long climbing is fatally injurious are past the reach of either evidence or logic.

The only argument which now remains hardly deserves the name, the fallacy involved in it being so very transparent. As it has, however, been seriously put forward, it may as well be quietly killed and finally buried, it is to be hoped to trouble us no more. It has been argued that miners cannot be seriously injured by climbing 200 or 300 fathoms (1200 or 1800 feet), because other men, bricklayers' labourers for example, often climb twice as much in the open air without appearing to suffer at all; if, therefore, it is said miners suffer from less than half as much climbing, it must be because they are, or have been, breathing bad air. No doubt that would make climbing in close mines worse, but that is not the reason why it is so much worse. The reason is of the wide difference between climbing, say, 30 or 40 feet at once 100 times a day, or 3000 or 4000 feet, altogether, and climbing 1200 or 1800 feet all at once. The labourer can mount to the scaffold in a minute or less, and then take breath before he has to mount again; his breathing need never become oppressed, his lips and face never become blue from venous blood being forced through the lungs unchanged, he is never made unable to speak from extreme breathlessness, nor is he bathed in sweat, and reduced to the extremity of exhaustion, as miners often are after climbing for an hour or more as fast as they can, and faster than they ought, without any rest, from the bottom of a mine three or four times as deep as St. Paul's is high. The two cases are entirely different, in the essential respect that one sort of climbing does, while the other does not, oppress the respiration, and, therefore, that one is, and the other is not, injurious to the respiratory organs. There is hardly any absurdity so great that we might not suppose it to be maintained by those who can argue that because climbing 30 feet 100 times a day does not injure the lungs, that therefore they will not be injured by climbing 1500 feet of ladders all at once. We might almost expect to hear of such a *reasoner* contending that because he could without injury jump off the door-step a hundred times, he might, therefore, safely jump from the house-top. He might be much hurt, even though he fell on his head. Such facts may, indeed, prove that it is not the mere labour of climbing that does the mischief, but it does nothing to prove that protracted severe labour, beyond the power of natural respiration, is not, as everybody knows it is, exceedingly injurious often, and very dangerous always.

P. H. Holland, M.R.C.S.L.

P.S.—I am sorry that I did not notice before a slight error in my letter No. II., published in the Journal of the 4th inst. Either I or the printer omitted the word "a" in the last sentence but one, which should have been as follows:—"There were 18 medical witnesses examined in Cornwall; two did not state very distinctly their opinion of the cause of miners' disease; of the sixteen who did eight mentioned catching cold repeatedly after climbing or working in hot places, eight named climbing, six bad ventilation, seven breathing dust, and three powder smoke; of course, most of them named several causes, and all, no doubt, would have done so if expressly asked, and I have as little doubts that all would have said, if so asked, that climbing from great depths was *a*, perhaps *the*, most powerful cause of disease"—to those who had to climb from great depth being, of course, understood. A writer in the Journal last week seems very angry with me for having exposed the mischievous absurdity of his opinion that "climbing ladders has but little to do with the development of Miners' Consumption," and more especially of attributing that absurdity to the late Mines Commissioners. It is true we reported that the excessive disease and mortality of miners—*i.e.*, of the majority of miners throughout all England and Wales—is mainly attributable to imperfect ventilation, or, more exactly, to its consequences, bad air, excessive heat, confinement of powder smoke, candle fume, increase of dust, &c.; but that is perfectly consistent with what is my individual opinion, that climbing is still more fatally injurious to those Cornish miners (the minority even in Cornwall) who have to climb from great depths. The same writer has made another gross misrepresentation of the Commissioners' opinion, to which I have not just now time to reply. He says they recommended that metal mines *generally* should be ventilated by furnaces. They have said nothing of the sort, and can only be made to appear to have said so by unfairly selecting a detached sentence, or part of a sentence, from its context. The same writer objects to me being considered an experienced observer, because he says my acquaintance with mines commenced at Lundhill a few years ago. He knows nothing about that, and happens to be wrong. I meant, however, that I was "an experienced observer of the causes of disease," to which subject I have long paid special attention. Has the writer done so who speaks so very confidently on a point of medical science? If not, a slight appearance of diffidence of his own opinion would be becoming, as he, unfortunately, differs from the most competent judges on that point.

CLIMBING LADDERS FROM DEEP MINES.

Sir,—The work performed by a miner in climbing ladders is easily calculated. Mr. Holland gives it undue prominence. Telford says a man's power is equal to 6000 lbs. raised 1 foot high per minute for 10 hours a day. Bernouilli reckons a man's power equal to raising 20 lbs. through 3 ft. per second for 8 hours a day, equal to 3600 foot-pounds per minute. Schulze, of Berlin, found a man equal to 29 or 30 lbs., with a velocity of 2½ feet per second, equal to 4500 foot-pounds. The average of these three examples is 4700 lbs. lifted 1 ft. high per minute. Now, suppose the average weight of a miner to be 160 lbs., we can readily see what time it would take him to ascend 200 fms. without distressing himself:—$\frac{160 \times 1200}{4700}$ =40 minutes. That is, in the same ratio, a miner, without distressing himself, will ascend 50 fms. in 10 minutes, 100 fms. in 20 minutes, 150 fms. in 30 minutes, 200 fms. in 40 minutes, and 300 fms. in 60 minutes. If I understand Mr. Holland, his opinion is that miners' disease is caused by the miner "climbing ladders for an hour or more at a time as fast as he possibly can." Now, if my data are correct, a miner is doing a very ordinary "duty" if he takes an hour to climb 300 fms., and he is by no means to be compared to a "galloping horse" when he climbs at so moderate a pace. Indeed, the work is such that he could do so for eight hours a day. That some miners may climb too quickly may be true; but, again, there is no comparison between such a man (or donkey) and a galloping horse, because the former moves as suits himself, the latter is spurred on by its master. I rather think Mr. Holland has not sufficiently tested the evidence of the men upon the climbing question. I think miners' disease has nothing to do with ladder climbing, but is due entirely to want of ventilation, and have given one instance where miners' disease existed, and is now banished (the fact of the ladders occurred to me afterwards as a curious coincidence, but they had nothing to do with it, the ventilation did the business). I could multiply instances, but not without giving names, which I do not wish to do. I have also been down Cornish mines, and seen the mode of ventilation, the state of the mines, and the state of the air the men were working in, and the whole arrangements, and I am satisfied that the ventilation is so indifferent, that "miners' disease" must be the result. I have also looked over the evidence of the Commissioners, and am satisfied, from the state of matters disclosed, that there cannot be sufficient ventilation generally in Cornish mines, and that miners' disease must be the result. I am not a medical man, I am a collier; but I submit that I know good air from bad as well as anyone, and I know that bad air produces disease. I have read over some of the evidence of the medical men on the matter, and would scarcely draw the same conclusions as Mr. Holland: moreover, there is room to doubt if these are the most competent judges. Mr. Kingston (3365) was only *once* underground; climbing, it appears, did not agree with him; "my heart almost jumped out of my side!" Yet he is obliged to admit that the "poor air" (3724) affects the lungs, and produces consumption. Mr. W. M. Tayler thinks (3798) that more disease arises from climbing than from badly-ventilated ends; but he admits (3800) he had never been "down." What is the worth of such an opinion? Although he has not been down, he is able to say (3899) that their work is not so very severe: they perspire a good deal in hot levels and "in climbing, if they climb fast, which they will do." Does not think sinking shafts (3903) so very laborious!

Mr. J. Pearce can scarcely go so far as Mr. Tayler, and he knows (4002) that about 20 years ago the workmen in Beam Mine suffered badly, "the ventilation not being so well attended to there;" in fact, in riding through the district one could say, that is a "Beam man." Nearly (4001) all the miners of that mine suffered from miners' consumption. Buckles Charleston Mine (4003) was comparable with Beam Mine. "It is unusual to find miners' consumption formed in Buckles Charleston Mine; it is not very deep, and *it is very well ventilated*. Now, these three medical men may be skilful men in their profession, but no one would say that from their own experience they are in a position to give an opinion whether it is the air or the ladders that produce the miners' disease; they have not gone down to see, neither have they paid attention to the state of matters below, and their conclusions will be very differently valued by a practical man than they will be by many others.

I am obliged to Mr. Holland for noticing my communication. I can scarcely expect him to do so; I will, however, at leisure return to the subject, and, with your leave, will make some more remarks on the report.

A Collier.

A DISCOVERY OF COAL IN THE FALKLAND ISLANDS.

Sir,—It may be interesting to your readers to learn the few particulars of a discovery of another coal field in the southern hemisphere, contained in the following extracts from recent letters from my brother at Rio Janiero. They embrace all the known facts sent to me, with the exception of a map showing the site of the coal.

John Plant, F.G.S.

H. M. S. "Egmont," Rio de Janeiro, Sept. 17.

Dear Sir,—During a visit to Stanley Harbour, East Falkland Island, in April, 1863, I chanced to become acquainted with that indefatigable teacher of the Gospel, the Rev. C. Bull, and accompanied him on a tour round the island. Having to cross the head of Grantham Sound at low water, we observed an escarpment of rocks (Ricon de los Terramotos), lat. 51° 40′ S., long. 59° 00′ W., on which was exposed a bed of coal. On examining it, I found the upper part of the cliff or precipice to be composed of red-coloured sandstone, below which was a thin layer of bluish clay, separating the coal seam from the overlying sandstone. The bed of coal, which is the lowest rock exposed on the cliff, and appears to incline towards the north, has been laid bare by the action of the sea to the depth of 14 to 16 feet, though it is evident that it extends to a greater depth, as the ground underneath the cliff is composed of the same coal. I managed to break off several specimens, some of which immediately crumbled into black powder, while others broke up into bright, shining splinters. On the opposite, or eastern, side of the same island I also observed what I consider to be the same bed of coal exposed on a point of land near to Island Harbour (lat. 51° 58′ S., long. 58° 15′ W.); but there the coal appeared to be of a more slatey structure. I had some of the coal from the latter place burnt, but found that it gave out no flame, and ignited very slowly, which I attribute to its having been, in a great measure, decomposed from exposure to atmospheric and aqueous agencies. The smoke given off during combustion emitted a very sulphurous smell. I forwarded specimens of the coal from both localities to an eminent geologist in England; but, never having received any acknowledgment of their arrival, I fear they did not reach their destination. Being aware of your geological discoveries and investigations of the Brazilian coal fields, I forward you some specimens of the Falkland Island coal for examination, and should feel indebted by your informing me whether you consider it of a quality likely to be of use in a commercial point of view. Should it prove to be a coal suitable for steamers, I need hardly observe that, if an extensive bed of it exists, the advantages possessed by the Falkland Islands as a coaling station for steamers bound to and from the Pacific and our Australian colonies would be very great. There is good anchorage and ample depth of water within 40 yards of its site, and fresh provisions are easily obtained in the neighbourhood at a very low rate.

To Mr. Nathaniel Plant, Rio de Janeiro. Ramsey Cooke, Master, R.N.

Note by Mr. Plant, of Rio.

I have examined the specimens of coal sent me by Mr. Cooke, and find those from "Rincon de los Terramotos" to be true anthracite, and, although some pieces are very much decomposed, others retain their brilliancy and peculiar conchoidal fracture, like the anthracite of Pennsylvania. The specimens taken from the Island Harbour have a slaty structure, and contain sulphuret of iron, which will account for the sulphurous smell emitted when burnt. The fact of Mr. Cooke finding the anthracite coal, 14 to 16 ft. thick, cropping out in the cliff "Terramotos," and again at Island Harbour, would give about 55 miles for the extent of the bed from E. to W., and lead one to conjecture that the East Falkland Island possessed a bed of anthracite coal traversing it from one side to the other. On showing Mr. Cooke my collection of carboniferous rocks from the valley of the Candiota, in the province of Rio Grande do Sul, he at once recognised the sandstone from that district as being similar to that overlying the coal stratum in the Falkland Islands, and a general similitude to the rocks of the East Falkland Islands. Certainly the advantages possessed by the Falkland Islands as a coaling station for steamers going round Cape Horn are very great, and if the British Government should decide on making a penal settlement there the mines could be worked by the convicts. The facilities for steamers obtaining supplies of coal when the Rio Grande Mines are opened would be so great that, in all probability, Pacific steamers would supersede sailing vessels in taking out cargo. They would require much less space for fuel, seeing that they could coal at Cape Verde, at Rio with Brazilian coal, and then at the Falkland Islands, which would take them to Chili, where coal is now being worked.

COLLIERY WORKINGS IN SOUTH WALES—THE LOCAL MANAGERS.

Sir,—For the last three weeks I have been too busy to look at the Journal, neither was I aware until I was told last week when at Aberdare of the thunders that were rolling so innocently over my devoted head. Now, in the first place, I know nothing of the letters and paragraphs which have appeared in the Journal in reference to myself. I apprehend the observations in question are from one of the poor dupes who ventured his cash in the Ely Merthyr Colliery, on the strength of the opinions of the Local Fraternity, and lost his money. I had almost forgotten the matter myself until I asked the secretary of that company if the allegations were true, when he informed that every word was true so far as the Ely Merthyr Colliery Company were concerned. Now, I would ask "One of the Local Fraternity" how he managed to skip over the damaging allegations the letter one of your correspondents contains, and why he found it so convenient to refer to the weather (may I inform him, none of the Local Fraternity are engaged in that operation), or any other subject, rather than attempt to refute facts put forth by parties who have lost their money on the faith, assumed honesty, and judgment of the Local Fraternity? Although I know nothing of the writers of the letters in question, still, in the interest of truth and English capitalists, I have no objection to meet, not only one, but all of the Local Fraternity in a body, and compare notes as to my conduct and their own in colliery matters. But why does he withhold his name and address? Is it not cowardly to attack from behind the stone wall of an anonymous signature? Come out in the open field, with your name and address. I am ashamed of such an opponent. No man ever gains any credit by putting a coward to shame.

But, Sir, from the studied silence in reference to Welsh colliery engineering at the Ely Merthyr Colliery, are we to assume that the truth has been spoken; that the Local Fraternity *did* support one of their body, furnished him with testimonials and laudations as to his abilities to make that colliery a paying concern, by working the said colliery from a point where there was no coal to work, and that on the faith of these testimonials the company *did* spend a large sum of money in railway sidings, and for opening out works, which when complete the colliery was not capable of yielding half-a-dozen railway trucks of coal per week, and that at a cost of something like 10s. per ton in the getting. Can all this be true?

But what is this? Why, here is a colliery, No. 2, close to the Ely Merthyr, managed by another of the Local Fraternity. This company also built railroads, purchased colliery plant, &c., but no coal can be found, and the affair is shut up ere the railway to the colliery is complete. But, further, "One of the Local Fraternity" has alluded to my short stay in the Aman Valley. Shall I tell him what I found there? In the first place, I found one of the finest seams of coal I ever witnessed, 6 feet thick, 281 acres surface area of coal, without a fault. Nearly the whole of this seam had been pig-rooted over. Such a seam of coal over the above area, if properly worked, would have yielded about 6000 tons of coal to the acre, thus—281 × 6000=1,686,000 tons. This colliery has only been at work about ten years, and the average get of coal 50,000 tons per annum, and this seam is exhausted, or as follows:—

281 acres, containing	1,686,000	tons of coal
Coals worked in ten years	500,000	„
Coals lost	1,186,000	„

Or 1,186,000 tons of coal lost by genuine Welsh colliery engineering in working the coal out of 281 acres from one seam alone! I am also told that 84,000*l.* has also been lost here in destroying all this mineral wealth, so both the coal and gold are gone, as far as the proprietors are concerned. We will now pass on to the management of this colliery, as I found it under the direction of one of the Local Fraternity. On my examination of the colliery I found the surface railway at the works was in the River Aman. Passing on into the engine-house, I found a large, powerful steam-engine, with the cylinder lid broke, and the bottom of the cylinder out. There were two locomotive-engines (save the mark). Some ingenious person had been experimenting on the one engine to ascertain the amount of temperature the tubes would stand without any water in the boiler. As a matter of course, on examination of the tubes the interior of the boiler presented a most fantastic appearance. The experiment was complete, as far as the destruction of the tubes are concerned. The other locomotive was on the "sick list." Now, for the cost of the officials of this elaborate concern the expenses were something like as follows. I will not mention names, but give the various amounts:—

A, about	£700	0	0	per annum.
B, salary	400	0	0	„
C, „	85	0	0	„
D, „	52	0	0	„
E, „	400	0	0	„
F, „	52	0	0	„
G, „	52	0	0	„
H, „	400	0	0	„
S—The shareholders in the company	0000	0	0	„

The whole under the able management of one of the Local Fraternity, salary probably 400*l.* per annum, in addition to the above. In all the above small items the cost of the management, *de facto*, was not touched. Some persons will say, with all this expense, a great deal of work was being done. Well, I could not find, all told, *thirty men* at work, and not a single ton of coal being sold. The underground works I found in a corresponding state of repair. Well, in the short space of four months I repaired and erected three steam-engines, put the slides in the shaft, got the railway out of the river, put the underground works in order, and at the end of that time I was raising on an average 250 tons of coal per day, with only one rope on the pit at work.

For "One of the Local Fraternity's" information, I beg to inform him that during the first month I had the honesty to inform the chief parties interested that it was useless to attempt to make the colliery a paying concern if they indulged in such outrageous expense in the management. Well, I was told to cut down the expenses, but when it was found that cutting down the expenses included sweeping away all the above-mentioned salaries, of course, zeal for the company's interest overcame common sense and economy, and we parted company. Such is the short history of the affair to which "One of the Local Fraternity" refers. But I scarcely think the letter in question is from one of the Local Fraternity. To me it reads more like coming from one of the 400*l.* colliery *esquires*, whose "elaborate position" practical economy in working the colliery endangered. I would ask if this is not correct? I will refer to this subject again in next week's Journal. I must regret that "One of the Local Fraternity" has pulled out this additional statement of Welsh colliery engineering, because I know well there are gentlemen in Wales who blush at this state of things, and would much prefer to see capitalists receive better treatment, with an ample interest on their capital invested, in promoting Welsh industry. But if "One of the Local Fraternity" is not satisfied, I can assure him I have a lot more materials of a similar character in store if required. He may rest assured that Mr. Shepherd does not care, as he states, even half the value of a straw for such engineering ability he has been compelled to witness in South Wales.

One word to Mr. Naysmith, jun. I observe this personage dates his letter from the Bedlam, or Bedwlyn Colliery. When I was down in Wales, in December last, this embryo colliery was pointed out to me; the only object then visible was a few cube yards of dirt, no road of any kind to it. Last week I visited this supposed colliery, in ignorance of my lashing, which appeared in the Journal. On my return to London I found I had run into this sulky lion's den, and examined his teeth. Lower down the valley I have gone down a similar lion's throat; but, Sir, in both instances, I only found them stuffed with straw, and, therefore, quite inoffensive. At this Bedlam Colliery I found a few men cutting what I thought was a ditch, but I was told it was for a railway to the Bedlam Colliery

We walked up to the colliery, and found "three lumps of coal," a few cubic yards of coal dust, and a solitary hole in the side of the hill. The men told us they had found a seam of coal, from 18 to 20 inches thick; and in confirmation of what they stated, they showed us the three lumps of coal before mentioned. In conclusion, I beg to state I wish this young gentleman every success at his Bedlam Colliery; but from the mendacious statements he made on a former occasion, he must excuse me if I fail to give credence to any future assertions he may make, either in the Journal or elsewhere.—26, *Throgmorton-street, E.C., Feb.* 14.

G. SHEPHERD, C.E.

VENTILATION OF CORNISH MINES.

SIR,—I do not think the number of shafts in Dolcoath Mine hinders it from being treated, in the matter of ventilation, precisely the same as a coal mine. Any description would not be very interesting to your readers without a plan of the mine, showing the route of the proposed currents; but the basis of the ventilation might be arranged thus:—The old sump shaft might be made the upcast for the whole mine, and upon it might be erected one of Struvé's machines, to be worked by the pump-engine, and capable of delivering (say) 12,000 cubic feet of air per minute. Water-wheel shaft and Wheal Killas shaft to be the principal downcasts; all the others to be covered up, or, when that could not be done, all the entrances to them at the various levels to be shut off by doors. In this way the whole volume of air would be kept in two main currents, and sent anywhere, landing at the bottom of the old sump-shaft, which would be the upcast. There would not be nearly the same difficulty in doing this as there would be in a coal mine, for there is far less traffic. I see by Hunt's "Statistics" there were only 1026 tons of tin, and 629 tons of copper ore sold last year; now suppose the quantity drawn up to be 10,000 tons, this is as nothing to 30,000, 40,000, and 60,000 tons of coals, which is a common thing to be sent up one coal shaft annually. A COLLIER.

QUARRIES AND QUARRYING—THEIR POSITION—No. V.

SIR,—I intended when I begun my series to have finished them long ago; but man's intentions are not his own. Circumstances often prevent us fulfilling our desires; such, however, is my case, and, for aught I know, this may be for good. According to immortal Cowper, in his poem "The Progress of Error:"—

> "Some dream that they can silence when they will
> The storm of passion, and say, *Peace be still.*
> But *thus far and no further*, when addressed
> To the wild wave or wilder human breast,
> Implies authority that never can,
> That never ought, to be the lot of man."

The position of slate quarries is, as everyone can readily conceive, a subject of great importance. This is the first great step—the fundamental principle, as it were, in quarrying. So-called quarries, as we have often seen, may be laid out splendidly; the galleries may be planned out with the greatest of nicety, costly engines erected, tramroads made, and every other appearance of a magnificent quarry, but if Nature has not made the quarry, art never can. I admit that art developes, but does not perfect Nature. It is, therefore, a question of the utmost importance—Where are we likely to find a good quarry, and what are the indications appertaining thereunto? To treat this subject only very partially, we must consult geology; and in seeking a favourable position for a slate quarry, an insight into geology is a *sine qua non*. I am happy to find that this notion becomes more popular every day. There is nothing more at variance with the elevated power of mind than to think for a moment that rocks were formed by the effect of mere blind chance. Indeed, it would degrade the infinite wisdom of the Creator to suppose that he called the least conceivable atom into existence at random, much more so that he reared the venerable temples by chance.

Clay-slate belongs to the system called the primary. As far as geologists have yet discovered, granite is the foundation of every other stratum, for, sink as deep as we may, we cannot get through the granite. This, at least, is the common belief, although future discoveries may explode this notion. The clay-slate group is intimately associated with the gneiss, quartz rock, and mica schist groups, and is supposed to be partly formed from the disintegrations of these groups; and as these rest on and are nearest to the granite, they are thought to be the disintegration of it. Although the lines of stratification are greatly obliterated in the gneiss and mica schist groups, there can be no doubt that they are, in common with clay-slate, of aqueous formation. Here a question arises—If these groups are formed from the same source, how is it that there is so much difference in their structure and nature? Now, this difference is not so great as one may imagine; it is greater in appearance than in reality, and, as a general rule, metamorphism manifests itself "in proportion to the intensity of the agents at work, and the length of time these agencies have been in operation." Metamorphism, therefore, is the chief cause of this difference. Again, what produces metamorphism is another important question. On this we may say little except in theory, and we cannot do better than quote part of a paragraph by Mr. D. Page, F.G.S., on this point before we proceed to a few of our own observations on the position of a quarry.

"The problem of metamorphism is altogether a very difficult one, and one involving so many questions in the obscure departments of chemistry, electricity, and crystallography, that geology must rest satisfied in the mean time with indicating rather than defining the nature of the operative causes. The most obvious and general of these may be briefly enumerated:—1. *Heat by contact*, as when any igneous mass, like lava, indurates, crystallises, or otherwise changes the strata over or through which it passes.—2. *Heat by transmission, conduction, or absorption*, which may also produce metamorphism, according to the temperature of the heated mass, the continuance of the heat, and the conducting powers of the strata affected.—3. *Heat by permeation of hot water, steam, and other vapours*, all of which at great depths may produce vast changes among the strata, when we recollect that steam, under sufficient pressure, may acquire the temperature of molten lava.—4. *Electric and galvanic currents* in the stratified crust, which may, as the experiments of Mr. Fox and Mr. Hunt suggest (passing galvanic currents through masses of moistened pottery clay) produce cleavage and semi-crystalline arrangement of particles.—5. *Chemical action and reaction*, which both in the dry and moist way are incessantly producing atomic change, and all the more readily when aided by an increasing temperature among the deeper seated strata.—6. *Molecular arrangement by pressure and motion*—a silent but efficient agent of change, as yet little understood, but capable of producing curious alterations in internal struction, especially when accompanied with heat, as we see daily in the manufacture of the metals, glass, and earthenware."

I will resume this subject in my next. SAMUEL JENKINS.

Dinas Mawddwy.

MINERS' WAGES—CORNWALL AND NOVA SCOTIA.

SIR,—I noticed in the Journal of Jan. 7 an article on the "Emigration of Cornish Miners," signed "H. C. T.," and I beg to differ from the views of your correspondent. As a practical miner, I have had some experience amongst the Cornish miners who have emigrated to this colony, and who are now employed principally in the gold mines that are at present being worked. They work on contract, in a body of three, which is the quotum for a shaft, and usually get from $2·50 to $3 per diem, whereas a Nova Scotian can only earn $1 to $1·50. Supposing a miner works 300 days out of the year, say at $2 per day, this would be equal to $600 a-year, out of which he has only to pay from $2·50 to $3 a-week for his board. His boots, which are superior to those he gets in England, cost him $5. He has also to find his own candles, powder, fuse, soap, and paper for blasting. His chisels and picks are repaired by the company. They all speak highly of their present wages, and state that they can earn in two days what would take them a week in Cornwall, with harder labour, to obtain. A Cornishman is always preferred to a Nova Scotian, though their wages are double; but their labour is more than equal to the amount of wages. With respect to their wives at home, it is left to their own option as to what they send for their support, as the company do not interfere in this matter.

Halifax, Nova Scotia. J. G. TENNANT, Mineralogist.

MINING IN IRELAND—CORK DISTRICT.

SIR,—I have taken Mr. Brenton Symons's advice, and looked into his letters of Jan. 21 and Feb. 4, but cannot find in either of those letters that he has said anything about an engine-shaft for Browhead Mine, or the cost of it; but I do find in his letter of the 4th the following:—"To fully develope the Browhead Mine a 40-in. cylinder engine should be erected, and this, with a capital of 4000*l.*, will be found quite sufficient." Mr. Symons never said a word in his letters of Jan. 21 or Feb. 4 about 700*l.* or 15,000*l.*; and these sums he appears not to have thought of until he wrote his letter of the 11th inst. Perhaps Mr. Symons is is not aware that the "Cost-book System" is a dead letter outside the jurisdiction of the Stannaries? But why 7000*l.* would be sufficient under the cost-book to work a mine, when 15,000*l.* would be required under the Limited Liability Act to work the same mine, appears to me to be unaccountably strange and mysterious. With all due deference to the opinion of Mr. Symons, it is the opinion of very competent judges that the levels in Browhead Mine must be properly dialled before the site of the engine-shaft can be determined. There are those in this district who can tell more as to the actual results of the working of the mine for two months on tribute by Capt. Penrose and Capt. Roberts than Mr. Symons has stated, or professes to know. There is a long piece of granite between Browhead and Cappagh Mines, and it does not follow because Mr. Symons knows nothing of the intermediate mines that they are not as good as the one he says is the best in the district. Ballycummisk Mine is 150 fms. deep. There is a course of ore in the bottom level (purple copper) yielding by assay 69 per cent. of copper. I saw a specimen of the ore before it was assayed. Schull Bay Mine has sold 26,000*l.* worth of copper ore; this mine is only about 60 fms. deep. Some parcels of 80 tons from this mine have realised upwards of 30*l.* per ton. Browhead, however, is a good mine, and, like good wine, "needs no bush." A MINE PROPRIETOR.

Crookhaven, Feb. 13.

GOLD MINING IN NORTH WALES.

SIR,—I was much pleased with the letter of "Pilgrim of the Hills," alluding to the enormous expenses in gold mines in North Wales, and, with respect to the existence of workable quartz, I may mention that there has lately been a discovery of a rich vein of quartz in a place called Cae'r Hafod Eglwyseg, in this parish, containing 9 dwts. 6 grs. to the ton, as well as a quantity of nickel. I can vouch for the accuracy of these statements, as I have been witness to the assaying of them by a competent man. For all these good prospects, the proprietors are very loth to undertake the working of the mine, and are shuddering at the enormous expense occurring, as the "Pilgrim of the Hills" complains, in connection with the gold mines of North Wales. Such extravagance is certainly a great stumbling-block in the way of legitimate enterprise, and strange to say the owners themselves prefer to sell off rather than give it a fair trial. It would not be amiss if "Pilgrim of the Hills," or some other of the professionals (I see their names every week in the Journal), were to have a peep at this place. I wish "Pilgrim of the Hills" every success to economise the system of gold mining in North Wales. THOMAS EDWARDS.

Llangollen, Feb. 11.

WHEAL GEORGE AND CHARLOTTE MINE (OTHERWISE DEVON AND CORNWALL UNITED).

SIR,—I must beg to contradict that part of the statement made by your correspondent, "P. J. L.," in last week's Journal, respecting the above mine, where he says—"and the reserves of ore are valued by the Duke of Bedford's agent at 47,000*l.*" I have gone into no calculation respecting such reserves during the past two years, nor do I remember holding a moment's conversation on the subject with the company's agent or any other person for many months past. I do recollect offering my congratulations some weeks ago to the secretary, Mr. Down, on the great improvements that had taken place within the last year, and saying that the change in the company's prospects was most cheering, seeing that in the first part of the year the mine was worth nothing beyond the value of the materials standing on it, while at the close of the year its market value stood at 47,000*l.*, with every prospect of good dividends from future workings. I think this conversation between Mr. Down and myself has been repeated to "P. J. L.," who confounds the selling value of the mine with the reserves of ore in it, whatever those reserves may be.

Tavistock, Feb. 15. J. FAULL,

Mineral Agent for his Grace the Duke of Bedford.

EAST CARADON MINE.

SIR,—A glance at the recent progress of this mine will show the shareholders that Capt. Seccombe's advice to them on Nov. 8, not to part with their shares at 20*l.* each, is much more imperative now, when the shares are at only 14*l.* each, and the caunter has so much improved at the 80. The following particulars of the produce of this lode at that level for the last four months are extracted from the weekly reports in the Journal, and will show how little cause there is for the present depreciation of the shares:—

COUNTER LODE AT THE 80 FATHOM LEVEL.

		East.	West.	Price of shares.
1864. Oct.	15.	Worth 10*l.* per fathom	Worth 15*l.* per fathom	25½ to 26½
„	22.	Worth 10*l.* per fathom	Worth 12*l.* per fathom	23½ to 24½
„	29.	Saving work.....	Saving work.....	22 to 23
Nov.	5.	Saving work.....	Saving work.....	19½ to 20½
„	12.	Worth 5*l.* per fathom.....	Poor	19½ to 20½
„	19.	Worth 12*l.* per fathom	Poor	18½ to 19½
„	26.	Worth 13*l.* per fathom	Poor	18½ to 19½
Dec.	3.	Worth 5*l.* per fathom.....	Poor	18½ to 19
„	10.	Saving work.....	Poor	19 to 20
„	17.	Worth 5*l.* per fathom.....	Saving work.....	19½ to 20½
„	24.	Worth 5*l.* per fathom.....	Saving work.....	15 to 16
„	31.	Worth 6*l.* per fathom.....	Worth 5*l.* per fathom.....	14½ to 15
1865. Jan.	7.	Not reported.....	Worth 5*l.* per fathom.....	14½ to 15½
„	14.	Not reported.....	Worth 6*l.* per fathom.....	13½ to 14
„	21.	Meeting; no report.....	———	12 to 14
„	28.	Worth 15*l.* per fathom	Worth 10*l.* per fathom	13½ to 14½
Feb.	4.	Worth 18*l.* per fathom	Worth 18*l.* per fathom	13½ to 14

It will be seen from the above that, although the caunter at the 80 has so much improved, and is now more productive than at any period of these four months, yet the shares are at a little more than half the price they commanded in October, and holders should, on no account, be frightened into selling, but should buy, and add to their investments in the mine at such low prices, especially when it is borne in mind that the five or six lodes in the north part of the mine, which have been so productive in South Caradon, are yet to be developed. A SHAREHOLDER IN ALL THE CARADONS.

Meetings of Mining Companies.

CHIVERTON MINING COMPANY.

A general meeting of shareholders was held at the West Chiverton account-house, on Wednesday,—Mr. E. BURGESS in the chair.

The accounts for three months ending December, of which the subjoined is an abstract, were passed, and the report of the agents was submitted:—

CR.—Balance last audit.....		£1614	0 9
DR.—Labour cost and merchant' bills	£897 1 9		
Doctor's pence	2 5 0=	899	6 9
Leaving credit balance.....		£714	14 0

The assets consisted of arrears of call, 148*l.* 10s., and balance at bank and in hand, 899*l.* 5s. 4d. = 1047*l.* 15s. 4d. The liabilities were—merchants' bills, 333*l.* 1s. 4d.: leaving 714*l.* 14s. balance, as above.

Feb. 15.—We have holed the 50 from Cookney's to Murray's shaft, in the 40: the lode proved leady for about 8 feet in length in the 50. The lead ground improved to 8 fms. in length, of a very promising character, and can be valued at about 5 cwts. of silver-lead per fathom. This improvement induced us to put up a rise in the back of the 50, where we find the lode to be 2 fathoms wide, and worth 18*l.* per fathom. We have cut bearer-holes, fixed bearers and cistern, also fixed a plunger, brought down the main rods from the 30 to the 50, and got our permanent pitwork in good order to go to the bottom of the mine. We have sunk Cookney's shaft 4 fathoms below the 50, in a lode from 3 to 4 ft. wide, composed of spar, flookan, mundic, and stones of silver-lead. At Murray's we have taken off 10 fathoms of pumps from the 40 to the 50, as well as cleared and secured the shaft to within about 2½ fathoms of the 60. We anticipated to have made better progress in clearing the shaft; however, so far we have not had that good speed we hoped for. From what we have said in our former reports respecting the future of this mine, we are pleased to see the bottom part of West Chiverton Mine, which is considerably below the old workings of this, producing such rich courses of silver-lead ore. This we look at with much pleasure, as it will more than confirm our former reports on the successful issue of the bottom of this mine.—J. JULEFF, J. BERLASE.

The CHAIRMAN expressed his unchanged opinion as to Chiverton proving all that the agents ever led the shareholders to expect. Unfortunately, the draining of the old mine, from the wretched mode in which it had been worked, had taken longer time than at first anticipated; but the worst was over, and it must be gratifying to all to know that in a few days the mine would be cleared to the 60 fathom level, under adit, where there were good prospects.

Mr. BATTERS enquired of the agents their opinion of the lode, so far as seen, compared with West Chiverton at the same depth?——They replied that the appearances were identical, and that the lode in the back of the 50 was worth 1 ton of lead per fm., and that from all appearances they would have a good mine when drained, and in a fortnight's time the 60 would be reached, where double pitches could be set.

Capt. NANCARROW stated that in Chiverton he had worked on a course of ore worth 100*l.* per fathom, and that but little had been done to the bottom part of the mine, where good ore was left, and that his faith was undiminished as to the future, more especially as they were encouraged by the discovery of such rich courses of ore in West Chiverton at a much greater depth than ever seen at Chiverton.——The proceedings then terminated.

WEST CHIVERTON MINING COMPANY.

A general meeting of shareholders was held on the mine, on Wednesday, Mr. E. BURGESS in the chair.

The accounts, of which the subjoined is an abstract, were read and passed, and the agents' report was submitted:—

CR.—Balance last audit	£5947	7 2	
Lead ore sold	8494	5 5=	£14,441 12 7
DR.—Labour costs and merchants' bills	£4515	9 5	
Lord's dues	566	6 1	
Doctor's pence.....	19	3 10=	5,100 19 4
Leaving credit balance			£9,340 13 3

Feb. 15.—Williams's Lode: We shall next week commence driving the 90, east and west of Hawkes's shaft, in a lode worth 80*l.* per fathom in each end. In the 80 fathom level, 54 fathoms west of Hawkes's, the lode is large, and worth 30*l.* per fathom. We are now taking down a part of the lode which has been standing in the north side; we find it worth 50*l* per fathom. No. 1 winze, sinking below the 80 west, is down 2 fathoms, in a lode worth 100*l.* per fathom. No. 2 winze, sinking below the 80, is down 5 fathoms, in a lode worth 120*l.* per fathom. No. 3 winze, sinking below the 80, is down 2 fathoms, in a lode very large, and worth 120*l.* per fathom. In the rise above the 80 fathom level, 52 fathoms west of Hawkes's, the lode is 4 feet wide, and worth 50*l.* per fathom. In the 70, west of Burgess's shaft, the lode is 4 feet wide, and worth 20*l.* per fathom. The stopes on this lode continue to yield fair quantities of silver-lead ores.—Valpy's Lode: Since the last meeting we have opened on the north part, in the 80, about 15 fathoms of lead ground, which has been worth about 30*l.* per fathom. We are sinking two winzes in the bottom of the 80, on this lode. No. 1 is down 6 feet, in a lode worth 50*l.* per fathom; this winze is opposite the 90 fathom level cross-cut, at Hawkes's, where it will intersect the lode. No. 2 winze, sinking below the 80, is worth 25*l.* per fathom. The 70, west of cross-cut, is worth 10*l.* per fm. The winze sinking below the 80 is down 5 fms., in a lode worth 35*l.* per fathom, and appears to be improving in depth. In the 60 we have driven a cross-cut, north of Susanna's shaft, 11 fathoms, and cut a branch, which has varied in size, composed of rich silver-lead and blende. We are still continuing the cross-cut north, in search of other lodes. In the 50, about 54 fathoms east of Susanna's, we are driving a cross-cut north, to prove the north-eastern part of the mine, and we are pleased to say it is in a good channel of ground. Hawkes's engine-shaft is sunk below the 90 fathom level 2 fathoms 1 foot; the men are now engaged in fixing a drawing-lift in the 90, which we hope to complete in three weeks, when we shall resume sinking the shaft to the 100 with all possible dispatch. We have much pleasure in informing you that the strata are quite equal to our most productive lead-bearing channels of ground. Since your last meeting we have holed Burgess's shaft to the 70, and sunk 3 fathoms below; and in the 70 we have discovered a new bunch of lead, and opened on it about 9 fathoms, which will average 40*l.* per fathom. We are glad to tell you that the mine at no former period looked so promising to make deep, and as well long and lasting courses of ore as at this time. From the foregoing report it will be seen that there will be no difficulty in increasing the dividends, which will commence with the next account. —JAMES JULEFF, RICHARD NANCARROW, WILLIAM NICHOLLS.

The CHAIRMAN expressed the pleasure it gave him to present such a gratifying balance-sheet, and congratulated his co-adventurers on the cutting of such a rich course of ore in the 90, on Williams's lode, the discovery on the same lode in the 70 and 80, in the western part of the mine, and upon the rapid development of the mine generally. He said a better dividend could have been given, but the management deemed it more prudent to recommend for this time the payment of 15s. only, in order to make the balance in hand adequate to the requirements of the mine.

The PURSER explained the financial statement, and stated that he was frequently asked why larger dividends were not paid, and what necessity there was to have such a large balance in hand, evidently showing that it was generally supposed that it was a cash balance. But as all lead ores are only paid for by three months' acceptances from the day of sale, it has rarely occurred that they really have much cash in hand. Even now they were obliged to discount one or more of these ore bills to meet current expenses and to pay the dividend. This should be avoided, and to do so he would recommend the usual dividend of 15s. only being paid this time, but in future he thinks they will be in a position to deal with the profits in a more satisfactory manner without incurring any bank charges. The ore bills at present in hand amount to the large sum of 9694*l.* 5s. 5d. not yet at maturity, but all of which will be paid before the next account. Then he hopes and thinks we may, with safety, pay a larger dividend.

Mr. BATTERS knew that many of the shareholders expected a large dividend, but when they were made acquainted with the facts of the case he was satisfied that they would with the management entirely concur in their policy, especially that they can look forward to increased distributions in the future. Every effort had been made during the past quarter to disturb the minds of the shareholders by circular and newspaper paragraphs, the object of which was to damage the property, but the mine had baffled all adversaries. The cutting of Williams's lode at the 90 worth 90*l.* per fathom, with the prospects of cutting Valpy's equally rich, and the discovery in the western part of the mine, and the fact that the channel of ground sinking for the 100 is quite equal to anything ever seen in the mine, must satisfy everyone. Capt. F. Evans had recently inspected the mine for a large shareholder, and he pronounced the courses of lead to be more like the great courses of copper ore in Gwennap than anything he had ever seen, and that he had not before in all his experience seen such a discovery. The agents stated that the course of lead on William's lode at the 70 extended for about 110 fms.; that the 80 was better than the 70, and the 90 more promising than the 80; and that the mine never looked so well.

The CHAIRMAN congratulated his co-adventurers on the assured position of the property, and their brilliant prospects for the future, when the proceedings terminated.

CHIVERTON MOOR MINING COMPANY.

A general meeting of adventurers was held at the West Chiverton account-house, on Wednesday,—Mr. J. C. ISAAC in the chair.

The accounts, from the commencement of the undertaking, of which the subjoined is an abstract, were read, examined, and passed, and the agent's report was then submitted:—

CR.—Calls received.....		£9000	0 0
DR.—Total expenditure, including buildings, new 70-in. engine, boilers, &c.....	7555	2 1	
Leaving credit balance		£1444	17 11

Feb. 15.—Since the commencement of operations there has been a great amount of necessary work done for the economical and proper development of this property—built carpenter's shop, smith's shop, iron yard, material house, and offices, all of sufficient size to carry out the working of this mine on a large scale. Built engine-house and boiler-houses, fixed a new 70-in. cylinder engine, as, well two new boilers, with the capstan and shears, sunk engine-shaft 23 fms. below surface, fixed standing drawing-lift, as well as a large lift now in order to sink to the 30, which will be 40 fms. from surface. In this shaft there is a good looking channel of ground, which we consider of the same composition as the lead-bearing clay-slate in West Chiverton Mine, which adjoins this property to the east, where there are good courses of ore in the different levels driving toward this mine. Built two bob-stands, fixing bobs, as well 97 fms. of flat-rods from the engine to the old engine-shaft, which is 30 fms. below the adit, 10 fms. deep, and from what we can learn of the late party who worked this mine, there is a very kindly-looking lode, composed of soft spar and silver-lead ore, gone down in bottom of the 30 between the new and old engine-shafts. We have been informed that the inadequate machinery was the principal cause of the suspension of this mine, and we think with the present machinery and careful working and pushing down the new shaft there are considerably beyond ordinary chances of having a good and productive property. We calculate our cost for the next six months will be 350*l.* per month.—J. JULEFF.

Capt. Nancarrow, one of the agents of West Chiverton, made the following statement:—Having been employed in this mine during the whole of the last working, I have pleasure in giving you the following information as to its prospects:—The old engine-shaft is sunk 30 fms. below the adit; there are two known parallel lodes worked upon, and distant from each other at the adit 16 fms. The southern lode was intersected in the shaft about 5 fms. below the 20, and the northern one in the 30 fm. level; these lodes are worked upon about 50 to 60 fms. east of old engine-shaft, in the 10 and 20 fm. levels, and about 1000*l.* worth of lead was raised and sold therefrom. The 30 fm. level was extended east about 25 fms., and the ground in the back stoped away; in this level the lodes were only about 3 to 4 fms. apart. About 80 fms. east of said shaft, and nearly opposite the new engine-shaft, a good bunch of lead was discovered on the north lode at the adit, but was never cut below. The new shaft is, therefore, in a good position to intersect this in depth. Looking at the productiveness of these lodes in and above the 30, and their inclination towards each other, and probable junction at about the 40 fm. level, I think the chances at that point for further improvement very great. A crosscut has been put out south from the old engine-shaft, in the 30 to near the then boundary of the sett. As the sett is now considerably extended in that direction, this crosscut should be continued, and important discoveries may be expected from it.

A SHAREHOLDER thought the statement made by Capt. Nancarrow of the greatest importance, and was glad to find the suggestions of the Chairman so promptly responded to. It was suggested that the same should be sent round to the shareholders.

Mr. HAWKE, and other local shareholders, were only desirous that the adventurers should be possessed of all the information about the mine, that they, or anyone connected with the undertaking, were acquainted with. Several shareholders expressed themselves in the strongest terms of approbation at the spirited manner in which the mine had been up to the present time prosecuted, and with the powerful engine, substantial buildings, and, best of all, the excellent prospects of speedily having a remunerative mine.

The proceedings then terminated.

WHEAL CREBOR MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, St. Michael's-alley, Cornhill, on Tuesday, Mr. J. Y. WATSON, F.G.S., in the chair.

Mr. JEHU HITCHINS (the secretary) read the notice convening the meeting, and the minutes of the last were approved.

A statement of accounts was submitted, which (including the January cost), showed a balance of assets over liabilities of 219*l.* 1s. 10d.

The report of the agent was read, as follows:—

Feb. 13.—Since the last meeting, held in November, 1864, Cock's shaft has been sunk 4 fms., being now down to the 108 fm. level; but, in consequence of the lode taking a more perpendicular direction, the last 3½ fms. were sunk on the north side of the lode, where it was fully 7 feet wide; where last seen the lode was composed principally of capels and quartz, with occasional stones of mundic and copper ore. The ground under the skip has been taken down, and the road made complete for drawing to the 108 fm. level. The 108 west has been driven 8 feet by the side of the lode, and we shall cut through it shortly, where, from its appearance in the bottom of the 96, and the large, strong, and kindly lode in the shaft, together with the usual dip of the cross-course and shoots of ore, we may reasonably expect a good course of ore. The 108 east is driven 4 ft. by the side of the lode; we intend continuing this driving until we intersect the cross-course, which is about 7 fms. ahead. The 96 west has been driven 7 fms. 2 ft. 6 in., and the western cross-course intersected; in the last 6 fms. the lode has been small and unproductive; 9 ft. has been driven south on the east side of the cross-course, to prove if any more of the lode is standing in that direction, but nothing has been met with. The cross-course has been driven through, and 2 fms. driven north on the western side, and a small branch or lode intersected; we are now driving west on its course. The stope in back of the 96 west is worth 20*l.* per fathom. The 96 east has been driven 12 fms. 1 ft., being now 47 fms. 1 ft. from shaft; the lode where cut through, about 3½ fms. behind the end, was 3 ft. wide, worth 2 tons of copper ore per fathom; the last 9 ft. taken down was not so good, but in the present end it is 4 ft. wide, with a leader of good work 1½ ft. wide on the south part, yielding 2 tons of copper ore per fathom—a very kindly end. The 84 east has been driven 14 fms.; about 3 feet behind the end we cut through the lode, which was 3 ft. wide, composed of capels, quartz, and peach, producing 2 tons of copper ore per fathom; the lode is standing south of our late drivage, and no trace has been seen of anything south of the level for 30 fms. behind the end; at this point a branch is gone off south; should this prove to be the same seen in the end, and as productive, we have a long piece of profitable ground in the present end; the lode is 2 ft. wide, yielding 2 tons of copper ore per fathom, and if it continues as good until our next setting-day, we shall put the end men to rise in the back of the level, and the 72 fathom level end men to sink a winze in bottom of the 72, to ventilate and open out tribute ground; this can be done without any additional cost. The stopes in bottom of the 84 east, east of Hosking's winze, are worth 2 tons of copper ore, or 15*l.* per fathom. The 72 east has been driven 9 fms., being now 107 fms. from shaft; for the last 8 fms. of which the lode has been from 3 to 5 ft. wide, yielding 2 tons of copper ore per fathom; about 6 ft. behind the end the lode went off with a spike. In the present end the lode is again opening, being 1½ ft. wide—saving work, with every appearance of early improvement. The 48 east has been driven 12 fms., being now 62 fms from shaft; the ground is easy for driving, at 4*l.* per fm.; and as the lode and indications in the back of the 72 induce me to think that it will hold up, we consider the end is near that run of ore ground. The cross-cut south in the 96, west of Cock's shaft, towards the great Bucktor lode, has been driven 15 fms. 2 ft.; price 4*l.* 10s. per fathom. The tribute department is much the same as the past three months, and the men getting wages. We sampled on January 29 two parcels of copper ore, computed at 124 tons, and have now 70 tons broken on the mine towards the next sampling. We have opened and are still opening a large quantity of ground that can be taken away at a profit. Referring to the concluding remarks in the report for the last meeting, dated Nov. 16, and looking at the result of our workings since that date, and our present prospects, particularly in the 96 and 108 fathom levels west, we are of opinion the mine has considerably improved in value.—JOHN GIFFORD.

The CHAIRMAN having moved that the report should be entered on the minutes, and that the accounts should be passed and allowed, referred to the improved condition of the company's affairs, both as regards the position of the mine itself as well as its finances. The shareholders would see from the report just submitted that on January 27 there were sampled 124 tons of ore, the produce for the quarter, and that there was ready towards the next sampling no less than 70 tons more. Therefore, it was but reasonable to assume that their next sampling would be more than double the quantity last sampled. There was no mine in the county of Cornwall in which the merchants' bills were so closely paid up, as was evidenced from the fact that the total liabilities up to the present moment, including every merchants' bill, was only 411*l.*, which, he need hardly say, most favourably contrasted with the financial position of some of the mines of Cornwall.

Mr. JEHU HITCHINS, in explaining the condition of the mine, stated that a considerable amount of tribute ground was being opened. Three levels were being driven, and they assumed that the ore held up 5 fms. above and 5 fms. below the level, so that every

fathom driven opened 10 fms. of ore ground. In the bottom of the 96 fm. level west, in advance of the 108, the lode gone down is worth 6 tons of copper ore per fathom.

The Chairman, in reply to a question, stated that although the January cost had been charged, it was not due till to-morrow (Wednesday), and after the extra month's cost, the assets over liabilities was over 200*l.*

The report was ordered to be entered on the minutes, and the accounts were passed and allowed. A call of 1s. per share was made.

A vote of thanks to the Chairman terminated the proceedings.

CAMBRIAN CONSOLIDATED GOLD MINES COMPANY.

The annual general meeting of shareholders was held at the offices of the company, Great St. Helen's, yesterday,—Mr. Fisher in the chair.

Mr. J. C. Goodman (the secretary) read the notice convening the meeting, and the minutes of the last were approved.

The balance-sheet showed assets amounting to 14,542*l.*, of which 14,041*l.* was cash in the hands of the bankers.

The report of Captain Thomas Martin (the superintendent), after referring to the progress that had been made in the development of the mines since the last meeting, states that the conclusions he had arrived at with respect to the separate places (founded upon the different phases they had assumed during the past workings, with their present appearances), that with regard to No. 6 lode he much regretted to say he did not consider that on this lode there were prospects sufficient to warrant any further outlay. In the first place, the ends were now near the boundary of the sett, for which reason they could not drive much further; and, secondly, the indications were not encouraging. No. 2 lode he can conscientiously advise working on, and trying it with as much spirit as possible, so as to explore it speedily. The lode is auriferous throughout, and at about 4 fathoms from the surface, in No. 2 B shaft, a shoot was met with, richly mineralised, and yielding from 8 to 18 dwts. of gold per ton of ore; but, on account of its great declination to the east, the shaft in sinking soon passed through this richly mineralised shoot. The lode, however, still continues strong, and very promising to the bottom of the shaft, and yields from 26 to 29 grs. of gold per ton, and frequently producing stones with specks of visible gold. These prospects, although not much in themselves, are strong indications of being in the vicinity of gold, and fully as favourable as he had seen in valuable mines a few fathoms off a rich shoot; and, in his opinion, if this lode be further prosecuted gold will be found in paying quantities a little east of No. 2B shaft. Upon No. 3 lode he could not recommend any further outlay, the ground being hard and poor, and the ventilation very imperfect, and he did not see sufficient promise of success to warrant him spending money to ventilate it to enable further working. With respect to the Wellington and Hendraforion, Capt. Martin feared the present appearances failed to justify expectations of finding sufficient gold in either of those mines to form establishments without spending a large sum of money. He, therefore, recommended that for the present no further outlay be made upon either of them. The Lydia lode, on the western part of the North Vigra sett, was an exception, as this place was promising for gold, different samples from there having produced from 10 to 26 grains of gold per ton, and he strongly recommended a trial; but the place being at present full of water, it would require machinery to drain it. In concluding the report, Capt. Martin states that, although he had to regret that up to this time he was unable to congratulate the shareholders on the looked-for success anticipated in his last report, he assured them that he had every hope that a further prosecution of the works specially recommended by him in this report would yet prove productive and remunerative to the proprietors.

The report of the directors stated that at the last annual meeting they hoped to have had the pleasure ere this of reporting the realisation of the expectations then entertained that the property would shortly be in a paying condition, and it is with great regret they find themselves unable to do so. Their experienced mining captain, however, still entertained a strong opinion as to the ultimate success, chiefly founded upon the discoveries on No. 2 lode. The workings there to this time had, no doubt, failed in making profitable returns, but this appears to be owing to the rich shoots underlying very fast eastward, which takes them out of the line of the present shaft. Nevertheless, if vigorous measures be adopted to prove the ground in that direction, he thinks that the expectations held out will be fulfilled. The directors have been recently advised by Mr. A. Dean that there is on the North Vigra sett a continuation of a large lode from an adjoining property, which he states has been proved to contain 1¼ oz. of gold per ton. The workings on this lode are at present under water, but, in consequence of Mr. Dean's report, they will be resumed at an early period. This operation, and the development of the ground eastward of B shaft, on the No. 2 lode, are the principal points to which it is proposed to confine future workings, and thus the monthly cost will be considerably reduced. The directors have had in view the possible advantages of acquiring other properties, and, after entering into several negociations, they have much pleasure in stating that they have now secured the option of purchasing, upon reasonable terms, a property which they are informed is of a highly valuable nature, having been proved at surface for a continuous distance of 14 fms. to carry ore containing gold of 1 to 2 ozs. per ton. The directors have reason to believe that this mine will prove a most valuable addition to the properties already held by the company, and compensate the shareholders for the want of success which has hitherto been experienced; they, therefore, strongly recommend the shareholders to sanction the purchase of the new property.

Upon the motion for the adoption of the report, the question of the advisability of acquiring the new mine was discussed, although it was mentioned that it could be partly purchased, and its merits practically tested upon a large scale, for less than 1000*l.*, the remainder of the purchase-money not to be paid until 5 and 10 per cent. respectively had been paid upon the entire capital. An amendment was carried to the effect that the report of the directors should be adopted, except so far as it related to the acquiring of the new mine; whereupon a poll was demanded, which the Chairman decided should be taken on March 3. The details of the meeting will appear in next week's Journal.

ENGLISH AND AUSTRALIAN COPPER COMPANY.

The ordinary general meeting of shareholders will be held at the London Tavern, on Feb. 23, when the fourteenth annual report of the directors, of which the subjoined is an abstract, will be submitted:—

The report and accounts are for the year ending June 30, 1864. The gross quantity of ore delivered to the works by the South Australian Mining Association during the year was 8228 tons 17 cwts. The gross quantity of ore and regulus received from other mines was of ore 864 tons, and of regulus 671¾ tons=1535¾ tons. The quantity of ore smelted at the Burra Smelting Works, from July, 1863, to January 12, 1864, when the fires were let out for the summer season, was 2887¾ tons, and the copper made 653 tons 5 cwts. 1 qr. 12 lbs. At the Port Adelaide Smelting Works, during the same period, 6788 tons were smelted, and 1578 tons 6 cwts. 25 lbs. of copper made. The quantity of copper shipped from South Australia during the year ending June 30 was 1023 tons 17 cwts. The works have proceeded with regularity during the season, the average number of furnaces at work at both mines being 5¾, exclusive of refineries. The Burra Burra Mine continues in a satisfactory state, and the average for the last half-year has been 3462 tons, estimated to contain 22 per cent. of metallic copper; this quantity, however, is far below previous years. The subject of placing the company under the Act of 1862, with limited liability, has been considered, and a scheme has been devised to protect the shareholders and afford all reasonable security to present and future creditors of the company. The proposal has been submitted to the directors of the Burra Burra and South Australian Banking Companies (the company's principal creditors), with a view to secure their concurrence, before asking from the proprietors of this (the English and Australian Copper) company the power necessary for carrying out this very desirable step. The statements of accounts show that the profit realised during the year ending June 30 was 7373*l.* 16s. 11d., and that the present balance, after adding the amount of undivided profit on June 30, 1863, and deducting the dividend paid in August last, is 1208*l.* 7s. 8d. The directors regret that the profit of the year was so small; the cause, however, can be clearly traced to the fall in the price of copper. On reference to the report presented to the proprietors at the annual meeting this time last year, it will be seen that copper then stood at the satisfactory price of 116*l.* per ton; it now stands at 92*l.* per ton, a difference of 24*l.* per ton. The principal shipments of copper embraced in the accounts which are now before the proprietors arrived in England when the ruling price of copper had fallen from the price above quoted, of 116*l.* The shipments to India necessarily suffered by the severe mercantile crisis which has prevailed throughout the chief part of the year, both at Bombay and Calcutta. Notwithstanding these drawbacks, which were only temporary, and beyond control, the directors think there is ample room for congratulating the proprietors on the manifest improvement in the position and prospects of the company which is exhibited in the year under review. Extreme economy in working has been accomplished by judicious contracts. The smelting operations at Kooringa and the port have been so arranged as to materially reduce the cost of cartage, whilst the increasing supplies of ore from numerous sources promise a most satisfactory future for the company. The directors recognise the zealous efforts of the manager and his staff of officers. The reserve fund now amounts to 11,854*l.* 11s. 3d. Consolidated Three per Cents.

Cornish Pumping Engines.—The number of pumping engines reported for Dec. is 37. They have consumed 2935 tons of coal, and lifted 21·9 million tons of water 10 fms. high. The average duty of the whole is, therefore, 49,700,000 lbs. lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

	Millions
Boscawen—70 in.	53·5
Cargoll Mines—Michell's 72 in.	58·6
Carn Brea, 76 in.	50·8
Cook's Kitchen—60 in.	53·3
Crane—70 in.	65·1
Dolcoath—Harriett's 60 in.	56·4
Great Wheal Busy—Harvey's 85 in.	64·5
Great Work—Leeds' 60 in.	64·0
North Wheal Crofty—Trevenson's 80 in.	58·5
South Wheal Frances—Marriott's 75 in.	68·1
Treloweth—60 in.	52·2
West Caradon—Elliot's 50 in.	57·5
West Wheal Seton—Harvey's 85 in.	54·0
Wheal Ludcott—Willcocks' 50 in.	63·5
Wheal Margery—Welsley's 45 in.	56·5
Wheal Seton—Tilly's 70 in.	76·2
Wheal Tremayne—Michell's 60 in.	50·6

Ammoniacal Gas as a Motor.—M. Ch. Tellier has conceived a new and curious application of this gas. He proposes to take advantage of its peculiar properties and use it, in certain cases, as a substitute for steam. The qualities referred to are, its great solubility in water, its easy liquefaction, its power of supplying motive-power at the ordinary atmospheric temperature, the capability of its vapour to being superheated without too great an increase of the temperature, the possibility of re-collecting it by solution, and the faculty of extracting the latent heat from its vapour, after the latter has been employed, and transmitting it to that which is about to be used, by the simple act of dissolving the gas in water. With a given quantity of ammoniacal gas and three times its weight of water, says the inventor, the whole of the former may be vaporised, and used as a motive force, with a pressure of 8 to 10 atmospheres; and the action would be constant, because the latent heat required for the vaporisation would be constantly reproduced by the caloric released by condensation. So that liquid ammonia is said to supply an instantaneous and practical means of obtaining a motive vapour. With about 22 lbs. of the liquid, we are told, the force of one horse may be obtained for an hour. The inventor does not pretend to place this system in competition with the steam-engine, but only where the production of steam would be impracticable and inconvenient. For instance, he says, "an omnibus, drawn by two ammoniacal horses, only need carry about 40 lbs. of liquid ammonia and 120 lbs. weight of water. This would supply a simple motor, without smoke or steam, instantaneous in its action, however long and frequent were the stoppages, and with an economy over horses of at least 75 per cent." M. Tellier also recommends his invention for steep inclines on railways, tunnels, mines, and other places where heat cannot be tolerated.—*Society of Arts Journal.*

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has been moderately active during the week, most probably arising from business in connection with the usual fortnightly account, which took place on Tuesday last. Independent of which there have been enquiries for shares generally, which, although of a restricted character, are more than likely to result in a better and more animated market.

West Setons have been rather more in request, and some transactions reported.—Wheal Setons are less active, and declined.—Cliffords have been dealt in at minimum quotations.—West Tolgus are being offered at lower rates.—Wheal Bassets are enquired for, and maintain their price.—East Bassets have changed hands at lower prices, and freely offered.—Stray Parks have been in request, and several transactions effected at higher figures.—Tincrofts have been in demand, and slightly advanced.—South Frances are enquired for at nominal prices.—Great Laxeys have been in good demand, and rather largely dealt in at improved rates.—Great North Laxeys continue to be enquired for, and large numbers are reported to have changed hands.—Great South Tolgus have been in better request.—Frank Mills are sought for at market prices.—East Wheal Grenvilles have been largely in demand at advanced prices.—Wheal Greenvilles are being enquired for at minimum figures.—North Treskerbys have been sought for at minimum quotations.—North Croftys are quiet at present prices.—Carn Cambornes have changed hands at fair market prices.—Pedn-an-drea are enquired for at improved rates.—Hallenbeagles have been dealt in at minimum figures.—Great Wheal Busy and East Rosewarne are sought for at buyers' prices.—Great North Downs have receded, being now freely offered.—Wheal Rose shares are in request at buyers' prices.—West Chiverstons continue firm, and in fair request.—Chiverton Moor, Chiverton Valley, and Chiverton are reported to have been dealt in.—Great Wheal Vors continue in good request, and maintain their price.

East Wheal Lovells have declined, in consequence of a reported falling off in the lode taken down in cutting the plat at the 40.—Sithney Wheal Metals are less active.—Providence shares are in request, and several transactions effected.—Unity shares have been largely dealt in, and prices slightly improved.—East Caradons are enquired for at higher rates, but few have changed hands, shares being very scarce, for cash especially.—Marke Valleys are slightly better, and sought for.—West Caradons are dull at present prices.—Glasgow Caradons are more freely offered, and buyers scarce.—Trelawny shares have been in good demand, and prices improved.—New Wheal Marthas have been in request at minimum prices.—Hingston Downs are quiet, although sought for at lower rates.—East Wheal Russells have fluctuated, but few shares changed hands.—Crebors have again receded, and more freely offered.

Great Devon and Bedford (Colcharton).—A very important improvement is reported to have taken place in the 30 fm. level, driving west, where they have a good lode of yellow copper ore, worth full 2 tons per fm., and presenting appearances of further improvement. This discovery urges the necessity of the immediate arrangement for laying out the dressing-floors, which are likely to be required at once.

East Caradon.—No important change has taken place during the past week in the aggregate value of the ends. The 80 west is still worth 18*l.* per fm., whilst the 80 east has slightly fallen off. The 60 west, on the new lode, has improved.

Hawkmoor.—The 25 east is looking a little better; the stopes are yielding about 1 ton of copper ore per fathom. At the western mine, the stopes in the back of the adit are producing some good work for tin.

Maudlin.—The 70 fm. level end east is still in gossan, carrying rich copper ore, whilst the water more freely percolates, which is taken as a very favourable indication. The rise in the western level is still valued at 20*l.* per fm. The men have been engaged this week in some necessary pitwork. At the western shaft the requisite work preparatory to sinking is going on satisfactorily.

East Treskerby has slightly improved in two or three places: the ground in the 30 east has become easier, as well as in the 12 east, the stopes in the back and bottom of the level being worth together 17*l.* per fm.—Wheal Margery is reported to have improved in the 122 and 132 east, with every appearance of greater improvements near. The mine generally is looking well.

Pedn-an-drea.—This mine is reported to have further improved. A short time since it was noticed that in the 110 they had met with a course of tin, which was worth from 35*l.* to 40*l.* per fm., and supposed to be the lode lost some 18 months since. Now they have in the south cross-cut intersected the same lode in the 120, producing rich work for tin, bnt as yet sufficient has not been seen of the lode to speak positively of its value, but there is little or no doubt of the discovery being highly important. There are other points which are looking more promising than for some time past.

At Wheal Sparnon, the 70-in. cylinder engine was put to work on Saturday last, and found to do its duty admirably. As soon as the mine is drained, and the levels cleared, some important discoveries are fully anticipated, as well as ore raised from the late discovery at the 20.

East Grenville has very considerably improved, and, from present appearances, likely to take a very important position as a permanent and productive mine. The improvements which have recently taken place are in the 75 west, where the lode is yielding 7 tons per fm., worth at least 6*l.* per ton, the quality of the ore having greatly improved, and in the 75 east. The 65 west is worth 3 tons per fm. (this end is in advance about 30 fms. of the 75, with the lode dipping west); in the back of the 65 they have a stope yielding 6 tons per fm., and another worth 15*l.* per fm. for copper and tin. There are other important points to come off shortly, which are likely to prove of some permanency, especially the junction of a north with the main lode, which will probably take place in about 2 fathoms more sinking.

East Wheal Lovell.—The sinking on the lode in the new shaft below the 40 will be resumed in the course of the coming week, where it was reported worth 100*l.* per fathom. In cutting the plat and taking down the lode some granite has appeared, and, consequently, temporarily disordered the lode. The cross-cut to intersect the south lode is progressing rapidly towards the shaft, where the lode continues worth full 90*l.* per fathom. The severity of the weather has prevented much progress in surface work at the Turnpike shaft, which is being made preparatory to the full development of that important portion of the sett.—Great North Laxey: According to the reports received this week the lode in the north end of the shaft is worth full 2 tons of lead ore per fathom, and the 60 has further improved, now yielding 1 ton per fatham, exclusive of blende, with which the lode is strongly impregnated.

Basset and Grylls.—The prospects of this mine are represented to be of more than ordinary character, that the ends are opening out good tribute ground, and the stopes yielding profitable work for tin. The last quarterly sales amounted to nearly 73 tons, and the current quarter will, in all probability, be equal to the last, or more. However cheering the future may be, it cannot be said that the past has been so gratifying to the shareholders generally. In glancing over the circular issued after the last quarterly meeting, the labour cost is given at 3147*l.* for that period, which will allow 1049*l.* for the month. That sum divided amongst the total number of hands employed—419, including 155 boys and girls—gives a monthly wage of 2*l.* 10s. for each individual, which appears rather extraordinary, for the latter especially. But, perhaps, the division is something like sailor's prize money, the largest share among the officers. Probably the managing agent and his colleagues who sign the official report may have some slight misgivings as to the proportionate distribution of wages according to the statement of accounts furnished absent shareholders, for they state in their report—"We have considered it necessary to reduce the amount of wages both to the underground and surface labourers." But would it not be more prudent to take from the officials and the children 50s. per month, and give it to the working men? There was one gratifying resolution passed at the meeting—the addition of two practical agents to the committee, to whose report absent shareholders will look forward with deep interest. For with a mine only down to the 50, returning 72 tons of black tin for the quarter, yet cannot meet cost, becomes a matter of surprise as to the course of management adopted. James Lane.

From Mr. James Crofts:—During the last fortnight the business on the Mining Market has been more select than abundant, the shares most dealt in being (of the progressive class) such as have in a heavy market risen into notice from their intrinsic merits and improvement; whilst in dividend mines, including Wheal Trelawny, Frank Mills, Clifford Amalgamated, Great Laxey, East Caradon, Tincroft, Herodsfoot, Devon Great Consols, Great Wheal Vor, Marke Valley, Minera, North Treskerby, West Chiverton, Wheal Kitty (Lelant), Wheal Mary Ann, and Wheal Seton, there has been a large business done in all of them at continually advancing prices. This enumeration of dividend mines are paying at least 15 per cent. average annual income, and are all safe and permanent properties.

Amongst the non-dividend mines of most prominence for the moment, and it may be for a permanency, is South Darren, in 6000 shares, the last report of which is dated Feb. 13, and shows most important improvements. The lode in the 60 fm. level end west is 2½ feet wide, and as far as taken down is worth for lead and copper 20*l.* per fathom, and promising speedy improvement. The lode in the 50 west is still worth 20*l.* per fathom, and an improvement also anticipated. In the 20 west the lode for lead and copper is worth 10*l.* per fathom. These shares have until lately participated in the general depression on the market, and the best symptom that can exist of their value is that the dealers who were sellers are now buyers of any number, and it may be fairly stated that the advance during the week is at least 10s. per share.

Great North Laxey.—It is a great pleasure to the writer to announce an important improvement in this mine. The lode in the north end of the shaft is 2½ feet wide, and worth fully 2 tons of lead to the fathom. The agent reasons on the importance of this fact in saying:—"I am glad to see this defined tendency of the ore to the north in depth, as every bunch of any note in Great Laxey has invariably taken the same direction. The lode in the 60 end south is 3 feet wide, improved in its general appearance, and increased in value from ½ to 1 ton per fathom of lead, besides being mixed with blende and ore." The public have as yet had little time to deliberate upon the value of this property, but they have shown already a strong appreciation of its merits by entering largely into it; and as no shares can be sold under 3*l.*, the chances seem to be for more than ordinary profits, and what is taking place in the mine, as detailed above, is a tolerably sure guarantee that those who become shareholders will not be disappointed in the results.

The Leawood, as is known, met with a mishap, by a "run," or dislodgement of ground in the mine, the effects of which have been not in any degree to alter the character of this property, but to delay the explorations. It has taken about two months to overcome the accident, which is now nearly accomplished; and Captain Daw, in a brief report, hopes in a week from this time to get the shaft secure, when the lodes already proved to exist can be efficiently explored, and, as a secondary consequence, the mine constituted in a larger number of shares, and brought before the public as one of the best speculations of the day.

Much attention has been paid of late, through the writer's advertisements in the Journal, to what he designates "speculative shares at nominal prices"—such shares as are now represented in value by shillings instead of pounds. The fact proves to be that such offers attract the attention of two classes of buyers—those who hold shares in such mines, and those who do not; the former buying to average a heavy cost, and the latter because the shares are simply cheap, and require an outlay of next to nothing; and when the very uncertain character of mining is taken into consideration, the chances of improvement are at least equal to those of depreciation, and as the writer's advertisements are in every sense *bona fide*, probably the publice will find it to their interest to pay more attention than is usual to this class of shares.

From Mr. Edward Cooke:—The market has been steady, with a moderate amount of business done. While some mines have declined a little in price, others have advanced. This, I need scarcely observe, is the character of mining property apart from market operations, but arising from improvements in lodes, and *vice versâ*. East Grenville, South Darren, and New Wheal Martha shares have advanced; on the other hand, East Lovel shares have declined, owing to the lode in the east end of the shaft not looking so well. In a mine like this, that is dealt in so largely on the market, every change in the value of the respective lodes is keenly watched by market operators, and, of course, turned to account, while similar changes in many quite as important mines are scarcely ever noticed. Probably a few days hence, or even while I am writing, the lode may be as valuable as ever. The south lode is valued at 90*l.* per fm., and next week operations are to be resumed upon the north lode at the new shaft, upon a lode valued at 100*l.*, besides which it should not be forgotten that the Turnpike lode is likely to be a very valuable adjunct when the flat-rods are completed. The lode at this place has been valued at 25*l.* per fm., while it can be driven for about 2*l.*, and will thus lay open very profitable ground. The improvement in South Darren is of a very important character. The lode in the 60 has been quite unexpectedly found upon taking down to be worth 20*l.* per fm., thus adding another rich level, making five levels in all driving in profitable ground. There can scarcely be two opinions about the future of South Darren, which will, no doubt, add another mine to the Dividend List during the present year.—Great North Laxey: It would really appear that those are right who have anticipated that this mine will prove no unworthy neighbour to the adjoining rich mine, Great Laxey. Already the 60 fm. level has greatly improved, and will now produce 1 ton of lead ore per fm., and the north end of the shaft is producing fully 2 tons of lead ore per fm. The lode at the shaft is contracting a little, which Capt. Rowe states has been generally the precursor in the adjoining mine, Great Laxey, to a course of ore. Should this prove to be the case in Great North Laxey, the shares will, no doubt, have a considerable rise in price sooner than expected. Therefore, those who think of buying would act wisely in not delaying their purchases while the shares are at a moderate price. I feel confident that the present is a most favourable time to buy into mines that possess real merits, and among them may be classed South Darren, East Lovell, Tincroft, East Vor, Great North Laxey, Great Laxey, &c.

From Mr. William Lelean:—It often happens that a person with only a small sum of money to invest is puzzled to know in what way he can do it to the most advantage. If he makes up his mind to run no risk whatever, he must be satisfied with Government stock, by which he may realise a little more than 3 per cent. per annum. But this will hardly satisfy the desires of a person who wishes to make something of 300*l.* or 400*l.* What to such a person is 10*l.* or 12*l.* a year? It is all very well for a millionaire, who has 40,000*l.* or 50,000*l.* over and above what he wishes, or finds it easy to permanently invest, or to sink in the purchase of real estate, 1200*l.* or 1500*l.* a year will suffice to expend on trifles out of the ordinary way of his expenditure, and he can otherwise invest his superfluous money whenever he is tempted to do so. But to the man whose surplus capital does not exceed 300*l.* or 400*l.*, 12*l.* or 15*l.* a year will answer but little purpose. He must look further a-field for channels of investment, of which there are many in which the risk of losing as well as the chance of gaining vary extremely from those in which the risk of loss is 1000 to 1 to those in which it is 1 to 1000. To select out of these calls not only for the exercise of much prudence, but often for the possession of much knowledge also. One's experience of the past year leads to the conclusion that joint-stock banks rank high in the estimation of the investing portion of the public, as well for their safety as for the large dividends they have been paying—that is, some seven or eight of them; and it is probable that one's experience of the present year, when it shall have reached its close, will lead to the same conclusion. That any one of those joint-stock banks to which I have just alluded offers a tolerably safe medium of investment no one can reasonably deny. Joint-stock banks have failed, and they will fail again, involving their shareholders in great loss, but such failures are not frequent occurrences. The risk of failure is there, however, and a comparatively poor investor may happen to have it fall upon him. It is to be borne in mind, also, that while a few of these banks have been making large profits, many others have not only not realised large profits, but have suffered great losses. The desire to obtain business has overcome the prudence that should have governed their managers, and bad paper, instead of solid gold, has fallen to the lot of the shareholders. But, apart from this consideration, which a good many people overlook, it may be remarked that many others, who ought to know better, entertain a very extravagant notion of the profits that are to be realised by the purchase of shares in the joint-stock banks that are making large profits. Such and such a bank, you hear, has during the past year paid 50 per cent. dividends, while others, though not quite so good, have paid 15, 20, or 30 per cent., and it is hastily and falsely concluded that such a rate of interest may be realised by the purchase of their shares. Now, if we take (say) eight of the most prosperous of these institutions, we shall find that the dividends paid last year ranged from 10 to 50 per cent. on their paid-up capital, as may be read in the public journals, in which their annual meetings have been reported. These were as follows:—

Bank.	Paid-up.	Dividends paid per annum.
London and Westminster	£20 0 0	32 per cent.
London Joint-Stock	15 0 0	50 "
Union	15 0 0	20 "
London and County	20 0 0	36 "
City	50 0 0	12 "
Bank of London	50 0 0	20 "
Imperial Bank	20 0 0	20 "
Consolidated	4 0 0	17½ "

These are, doubtless, some of them, very large dividends; but in order to ascertain what anyone may realise by investing in the shares of any one of them, the market price of the shares must be ascertained, and the calculation be made on the basis of this. I now give, therefore, the present market price of the shares in each of these banks, and the rate of interest to be realised upon those prices:—

Bank.	Price of share.	Interest realised.
London and Westminster	£ 95 0 0	6¾ per cent.
London Joint-Stock	48 0 0	15½ "
Union	54 0 0	5½ "
London and County	78 0 0	9¼ "
City	120 0 0	5 "
Bank of London	155 0 0	6 7-10 "
Imperial	32 0 0	12½ "
Consolidated	11 0 0	8¾ "

The first thing that strikes one here is the great disparity that is apparent in comparing the value of the dividends in these different banks, the lowest being 5 per cent., and the highest 15½; and the next thing, the disproportion between the rate of profit realised upon the shares at their original and at their present cost. Thus, while the original shareholder in the London and Westminster realises 32 per cent. for his money, the shareholder who buys at the market price realises but 6¾; while the original shareholder in the Bank of London realises only 20 per cent. for his money, the shareholder who buys at present prices realises 6 7-10. And the like disproportion will be found to obtain among the rest. It is not my purpose to attempt to account for these apparent anomalies; but there is no doubt that the estimated security of the respective banks has a good deal to do in the matter. Many persons would rather take a profit of 6¾ per cent. in the London and Westminster, with an invested capital of a million, than they would take 10, 12, or even 15 per cent. in a bank that offers no such security. In closing these remarks, I may just observe that it is not very probable that any of these very prosperous banks will be able to pay such large dividends for the present or for any future year as they were able to pay for the last. Nearly the whole of them have been increasing their paid-up capital, while the rate of discount has been gradually falling; so that while the capital upon which dividends will have to be paid has been increased by nearly 2,000,000*l.*, the profits out of which these dividends must be paid will, it is nearly certain, be considerably reduced. But, taking the case of these institutions as it stands for the recently-closed year—that is, the rate of interest realised by those who purchased at or near the present prices—they do not offer anything like the temptation they at first sight seem to do in comparison with mining enterprises, many more of the mines than of the banks I have enumerated paying dividends that range from 11 to 18 per cent. upon the market price of the shares, some of them having up to this time paid in dividends sums varying from 200,000*l.* or 300,000*l.* to more than 1,000,000*l.*; and there are as good fish in the sea as have been taken out of it. There are several progressive mines, as they are termed, which have not yet paid dividends, but which, as far as probabilities and skilled calculations can assure us of anything, will be equally profitable to their shareholders. At present their shareholders have to pay calls instead of receiving dividends, but it must be borne in mind that instead of having paid 15*l.*, 20*l.*, or 50*l.* on each share, with a liability for the balance of 100*l.*, as in the banks, they have paid but a comparatively small sum on each share, and make further payments only in small sums, as they are required for carrying on the works.

The Disc Telegraph, and the Festiniog Railway, North Wales.—This ingenious and simple telegraph, invented by Mr. C. E. Spagnoletti, London, is now in full operation in the long tunnel on the line of railway near to Tanygrisau, it having been put up by Mr. H. Spagnoletti, brother of the patentee. Its extreme simplicity is its distinguishing characteristic, and, for this reason and its effectiveness, it is strongly recommended by Captain Tyler, the Government Inspector of Railways, to be used in all railway tunnels. The plan consists in having two boxes, placed one at each end of the tunnel, and when a train enters at either end, an instant communication is made to the other end, announcing that a train is on the line—there being bells affixed to each box, to call the attention of the clerk to the fact. No accident, therefore, can possibly occur, unless through gross neglect on the part of the officer on duty. We are given to understand that the railway officials are highly delighted with its working up to the present time. Mr. H. Spagnoletti has likewise erected a bell telegraph on the Wrysgan Quarry incline (Mr. Barnard's), which has excited general admiration. The Wrysgan Quarry has made rapid progress of late towards a more extensive development of the property. They have two thick veins of fine slate-rock running through the sett, each upwards of one mile in length; it promises to be one of the best quarries in the district. A new tramway, or incline, 711 yards in length, is just laid down, to join the Portmadoc line. This will facilitate operations greatly, and such is its advantageous position that it may be worked at a moderate cost. It is chargeable with no royalty, but a clear rent of 100*l.* per annum. This property was bought by the present proprietors four years ago, including all the working plant, &c., for 2750*l.* A large offer, we understand, has been made for it—reported over 100,000*l.*

Old Wheal Neptune.—At the Stannaries Court, on Wednesday, Mr. Cock said that an order was made at the last sitting of this Court to pay the purchase-money for the materials and machinery of this mine by instalments, the first of which became due on Feb. 1, and the remainder by bills. Since then circumstances had occurred to prevent Mr. Harris doing so. An affidavit would be filed, showing that there were legal impediments which had prevented Mr. Harris, and asking for further time to pay for one month, but that in all likelihood he should be prepared before that. Mr. Marrack thought Mr. Cock should give notice of his motion to the solicitor employed, which Mr. Cock consented to do, the hearing to come on on Saturday.

The Tin Trade.—The tin standard remains as last reported:—Common, 87s. to 88s.; refined, 89s. to 90s. The great advance in the price of Straits, noticed last week, has somewhat given way, under the influence of a few parties realising their profits. The market now appears steady, and a good business taking place for export and consumption. The improvement in English continues, and there is more enquiry for tin-plates. It is calculated that if the price of tin remained as it was four years since, Great Wheal Vor would be paying its adventurers 15,000*l.* a year more than it does at present.—*West Briton.*

Oil in Canada.—If the oil region of Pennsylvania is worthy of the title of Petrolia, then is the corresponding section of Canada West entitled to the designation of Oleagena. During the past three or four years millions of gallons of oil of various qualities have been taken from its ground, either through the medium of flowing wells, or by the ordinary pumping process. So enormous was the yield at one period, and of so little mercantile value, the uses of the oil not being known, that Black Creek was covered to the depth of from 2 to 3 ft. with the crude article from flowing wells.—*New York Times.*

Coughs, Colds, and Asthmas—Another Testimonial in Favour of Dr. Locock's Pulmonic Wafers.—From Mr. Loder, 224, Stonebow, Lincoln:—"From my own experience as a large dealer in medicines, I can safely say that your wafers never fail to effect a speedy cure of the most distressing cough. They are truly an invaluable medicine." Price 1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Sold by all chemists.

Holloway's Ointment and Pills—Fear not.—Though surrounded by circumstances disadvantageous to health, these remedies, properly applied, will cut short fevers, influenza, inflammation, diptheria, and a host of other complaints always lurking about to seize on the weak, forlorn, or unwary. The superiority of Holloway's medicines over others for subduing disease has been so widely and fully proved that it is only necessary to ask the afflicted to give them a trial, and if the instructions folded round them be followed no disappointment will ever ensue, nor dangerous consequence result. In hoarseness and ulcerated sore throat the ointment should frequently be rubbed on the neck and top of the chest; it will arrest the increasing inflammation, allay disquietude, and gradually cure.

Mining Correspondence.

BRITISH MINES.

ALLT-Y-CRIB.—J. Hughes, Feb. 11: The deep adit is still carried on by four men; there are some spots of lead to be seen continually, but not to value. We have seen spots of lead some time ago, but it keeps on now more regular; it shows that we are on the right track for better; perhaps we have been rather sanguine. I am rather doubtful as to whether we have reached the right junction, and hardly believe it yet. The ore that we had in the sides of the new shaft makes me believe that there is a good body of the same sort when we reach under the same. The new shaft is ready to start under the old level. The tram-road is laid to surface. The lodge is cut, and the old timber secured; the water is taken over in launders.

BILLINS.—F. Evans: We are making good progress in sinking the engine-shaft below the 70. We have sunk since last report 6 feet, making it 6 fms. 1 ft. below the level; the lode is larger, and the ground more promising for lead ore. There is no other change to notice since last report.

BOSCAWEN.—R. Giles, Feb. 11: The lode in the 80, west of Hunter's shaft, is still small and unproductive, and the ground hard. The lode in the 80, driving east of sump-winze, is 2½ ft. wide, worth 15*l.* per fm. for copper ore. The lode in the 80, west of the above winze, is worth for copper ore 4*l.* per fm., and of a very promising character for improvement. The lode in the stope in bottom of the 70, east of the sump-winze, is worth 20*l.* per fm. The lode in the stope in back of the 70, west of Hunter's, is worth 12*l.* per fm. for copper ore. The lode in the 40, driving west of Hunter's, is at present small, and has formed a splice; it is worth at present 4*l.* per fm. No lode yet intersected east of the cross-course at the 30, driving east of caunter shaft. Our survey went off well. I have set a stope to six men in bottom of the 70, west of No. 2 winze.

BOTTLE HILL.—J. Eddy, Feb. 14: In going through the different stopes throughout the mine this morning I found the lode both east and west of new shaft to be about the same size, and producing about the same quality work as it has for some time past. I am sorry to say the frost has again stopped all our surface operations since Thursday last; this has caused a delay in our sampling. I calculated if the frost did not set in to have gone to the smelting-house with about 7 tons of tin on Saturday or Monday next, but for the present we are not able to do anything in the shape of dressing, neither shall we until we have a change in the weather.

BRYNTAIL.—J. Roach, Feb. 16: I have sent the box of barytes (about 1 cwt.) per goods train, addressed as you directed, but not until to-day. The ice and snow prevented me getting a sample before; I hope it will be approved of. The ice still prevents the pumping-wheel from working. We have had a very long and severe winter here.

CAPE CORNWALL.—R. P. Goldsworthy, Feb. 15: Saturday last was our pay and setting, which went off well. We set the following bargains:—The lode to take down in the 70 east, by three men; the lode is large, producing tinstuff of a paying quality. The ground to stope in back of the 55 east, by eight men, at 40s. per fm.; average value 4*l.* per fm. We have seven men on tribute, at 13s. 4d. in 1*l.* Our shaftmen are fixing the skip-road from the 55 to the 70, which they will complete this week, when we shall commence to drive the 70 west by a full pare of men. We have 38 fms. to extend this end to reach the great caunter, which we deem to be a point of great importance.

CAMDDWR MAWR.—G. Evans, Feb. 9: I have carefully examined this mine to-day, and find that the course of ore recently discovered has been opened for 7 fms. long, laying open a good lode of silver-lead ore 8 feet wide, containing many solid leaders, and presenting altogether a beautiful appearance; the full width and value of the lode have not not been ascertained yet, but I have seen sufficient to convince me that you have a very valuable mine.

CARADON AND PHŒNIX CONSOLS.—W. Richards, Feb. 14: The ground in the winze in bottom of the 20 continues favourable for progress. We hope to communicate with the 30 in about six weeks from this time; the part of lode carried contains quartz, mundic, blende, and a little copper ore. During the past fortnight we have passed through the granite, and entered the killas in the 30 east; this change I consider to be a good omen for deeper levels, because it is near junctions of this kind that some of the best deposits of mineral are met with. The part of lode carried in the present end is about 2 ft. wide, contains quartz, peach, blende, mundic, and copper ore; water issues more freely from the extreme point. The shaftmen are making fair progress in altering the pitwork, &c., at the 30, and I hope we shall have the plunger fixed at the 30 and the sinking of the shaft below that level resumed in about three weeks from this time.

CARADON CONSOLS.—W. Rich, Feb. 14: Good progress is being made in driving south. There is nothing new in the mine to report on this week.

CARGOLL.—Feb. 15: The lode in the stopes south from Michell's engine-shaft, in the back of the 123, is 6 ft. wide, and yielding 2¼ tons of lead ore per fm. In the 120 north the lode is 3 ft. wide, composed of quartz, blende, and copper and lead ores; this end has just passed through a shoot of lead ore worth 2 tons per fm. In the 110, north from Michell's, the lode is soft and very wet, yielding 14 cwts. of lead ore per fathom. The 30 and 20 fathom levels, north from Purser's, and the 10, north from Sargent's, are producing saving work.

CASTELL CARN DOCHAN (Gold).—J. Parry, Feb. 14: Owing to the frost, we have scarcely been able to work the machines. Since Saturday the ground has been thickly covered with snow, making it impossible for the carpenters to go on with the water-wheel. We are, however, able to work in the cutting for a place for the new engine-house and foundation for stamps. The mine is without much alteration. We found to-day some visible gold in the south-west stope, at the end of the shaft. Since my last we have also found a few specks of gold in the north-east stope, at the opposite end of the shaft. The lode in both stopes is about 3 ft. wide, and of a very promising character. We managed to tap the small machines this morning, and the produce of gold is 2 ozs. 1 dwt. 21 grs. from 7 cwts. of stuff, the result of 2½ days' working.

CEFN CILCEN.—T. Hughes, Feb. 16: Susan's Shaft: The driving of the 80 is being prosecuted with all vigour. The lode is of a very promising character, and impregnated with a little lead.

CENTRAL MINERA.—Thos. Hughes, Feb. 16: Western Shaft: The sinking is progressing with all speed, and is now 10 yards below the 40. The beds of limestone have taken a sharper dip, which I consider a good indication; the water keeps about the same. —Edgworth's Shaft: The pitch in back of the 50, east of shaft, is worth 10 cwts. of lead per fathom. Our surface operations are all suspended, in consequence of the weather.

CLARA UNITED.—J. Lester, Feb. 15: Llywernog: On Saturday night our pumping-wheel was stopped by frost, and at present there is no appearance of any change in the weather. The lode in the west end up to that date was without any alteration.—Dolwen: The lode on the 11th inst. was not looking so well, and since then we have done but little in diriving, as it took us until yesterday to clear away the snow which had blocked up the entrance of the level. The water being frozen the air-machine is not at work, therefore the air is very bad. I hope we shall have a change of weather soon.

CLOWANCE WOOD.—E. Chegwin, Feb. 14: In the engine-shaft, sinking below the adit, ground not quite so favourable for sinking; set to sink by nine men, at 17*l.* per fathom. Sank in the past month 2 fathoms; now down 15 fms. 6 in. below adit. The engine is working well and the water but little.

CORNUBIA.—T. Parkyn, J. King: The 70, on great north lode, is looking well driving east; we have two stopes working on this lode in the back of the level that are producing good work for tin. The west stope is greatly improved this week. We have suspended operations on the south lode for the time, as the air is not too fresh at present. We have a rise going up from the 70, and we shall hole it to the 60 this week, when we shall have good air, which is of great importance. In the 60, on new south lode, we have commenced stoping; the lode is opening out well, and we are raising large quantities of good work from this lode. The stope on No. 5 lode is looking much better, and we think will still improve. The stope on grrat north lode, in this level east, is looking well for tin; here we have large quantities of mundic with the tin. In the 50 we have now opened a stope on the old south lode, and broken some good work for tin; the lode is looking well throughout the stope, and we shall put on more stopes here when convenient, as we have about 30 fathoms of the lode all laid open, and can be stoped away as we clear the level. This is mundic-tin ground also. In the 40 we are driving south, and hope to intersect the new south lode this month; nothing else doing in this level for the time. In the 30 we have a stope on the south lode, and the lode is looking kindly, turning out fair quantities of tin; this is also mundic-tin ground. There is a stope in the 20, on the south lode, which is yielding some good stones of tin, free from mundic. It was our setting-day last Saturday, and all the bargains were taken that we offered. We are glad to inform you that the mine is looking better now than it has been for a long time past. The calcining-house is completed, and we shall return all the tin we raise this month, which we could not last month, as we advised you in our last; the house was only finished last week. All the calcining tin we have on the floors.

CRENVER AND WHEAL ABRAHAM.—J. Vivian, Feb. 16: We still continue to drain these mines satisfactorily, although not quite so rapid as we could wish, yet with one pumping-engine only we are making good progress. We have put the steam capstan and winding-engine to work in the 80, at middle engine-shaft, which is a splendid machine, and works admirably. We are getting the remainder of our pumping and winding-engines ready as fast as possible, but the state of the weather has been much against us. We shall get the 90-in. pumping and the second 30-in. winding-engine to work in a few days more.

CROWAN CONSOLS.—J. Vivian, Feb. 15: We are progressing favourably in sinking the engine-shaft under the 30. In the 30, west of Dumpling lode, the lode is 4 feet wide, producing saving work for copper ore and blende. In the 30 east, on Dumpling the 20 west, on Dumpling lode, the lode produces some good stones of copper ore, and looks kindly. In the 20 fm. level cross-cut, towards Curtis lode, the ground is favourable for driving through.

DALE.—R. Niness, Feb. 15: The yield and dip of the Pipe vein is almost the same as when I reported last week. The lead ore raised last month was 43 tons 13 cwts.; blende computed 40 tons.

DEVON AND CORNWALL UNITED.—T. Neill, Feb. 14: The lode in the 24 west is 2 ft. wide, and looking promising. No change in the lode east at this level. The lode in the 12 east is likely to improve. The two stopes in the back of this level are worth 5 and 6 tons of ore per fm. The lode in the deep adit level is looking very promising.—William and Mary: The lode in the 34 east is very promising. The lode in the 22 east, wall we have found another part of the lode, 3 ft. wide, worth 4 tons of ore per fm.; we shall see more of this by the end of the week. The stope in the back of this level will produce 8 tons per fm. Two stopes in back of the 10 are worth 5 and 6 tons per fm.

DEVON COPPER.—T. Neill, Feb. 15: I was on the mine yesterday, and put the men to cut through the lode in the 18 west. In the 18 east, driving on the north part of the lode, we have a branch about 2 ft. wide, producing fine stones of copper ore, and likely to improve. Everything is doing to sink the shaft as fast as possible.

— T. Neill, Feb. 15: At the 18 west the men have commenced cutting through the lode, which is looking promising. At the 18, driving on the north part of the lode, it is looking very promising indeed. We have a branch in the end 2 ft. wide, producing fine stones of copper ore. We are sinking the shaft as fast as possible.

EAST BROOKWOOD.—T. Bennett, Feb. 15: The late severe weather has greatly impeded our progress, not being able to work our wheel at a sufficient rate to keep the we have driven 1 fm. since last reported on. It is, therefore, extended 2 fms. 3 ft. from killas is light, with small branches of quartz impregnated with copper ore intermixed, all dipping towards the lode. I consider the indications in the present end are sufficient to warrant our expectations being realised in cutting a productive lode in this level.

EAST CARADON.—J. Seccombe, Feb. 15: Caunter Lode: The 70 east is poor. The 80 east is worth 12*l.*; and the 80 west, 18*l* per fm.—New Lode: The 60 west is worth 8*l.* per fm.—South Lode: The 80 west produces stones of ore.

EAST CARN BREA.—Thomas Glanville, Feb. 11: The 60 to drive east of Thomas's shaft, on No. 3 lode, by six men, at 4*l.* per fm. Thomas's engine-shaft to sink below the 60 by nine men, at 35*l.* per fm. The rise in back of the 60, east of the cross-course, fathom. The 50 cross-cut to drive south of the new lode by four men, at 6*l.* per fm. The 50 to drive east of Thomas's shaft by four men, at 8*l.* per fm. The 40 to drive east of Thomas's shaft by four men, at 12*l.* per fm. The 40 to drive west, on the new lode, by four men, at 3*l.* 10s. per fm. The 50 to drive west, on the new lode, by four men, at 4*l.* 10s. per fm. The 50 cross-cut to drive south of No. 6 lode by four men, at 6*l.* per fm. The 50 to drive west, on No. 4 lode, by four men, at 6*l.* per fm. The stopes in back of 60, on No. 3 lode, by two men, at 1*l.* 10s. per fm. The stopes in back of the 50, on the new lode, by twelve men, at 1*l.* 8s. per fm.

— Feb. 15: The heavy rain in the past week has caused the water to rise above the 70. We last night finished fixing a 14-in. drawing-lift at Thomas's shaft, and without an accident. We expect to have to have the water drained to the bottom in about a week from this time.—No. 3 Lode: In the 60, driving east of Thomas's shaft, the lode is producing 3 tons of ore per fm. In the 40, driving east of Thomas's shaft, the lode is producing 2 tons of ore per fm. In the 60, driving west of the cross-course, the lode is producing 3 tons of ore per fm.—No. 4 Lode: In the 50, driving west, the lode is producing 2 tons of ore per fm.—New Lode: In the 40, driving west of the winze, the lode is producing 2 tons of ore per fm.

EAST GUNNISLAKE.—Wm. G. Gard, Feb. 15: We have cut into the lode in the deep adit east of cross-course 3 ft.; the lode so far as seen is worth 20*l.* per fm., of rich yellow coated ore; ground speedy, with every appearance of a great improvement. We shall not be able to say more about it till Friday or Saturday.

EAST JANE.—J. Seccombe, T. Hodge, Feb. 16: In the 36 cross-cut west we have cut through the lode, the western part of which is about 3½ feet wide, well defined; it is composed of quartz, white iron, and flookan, and producing saving work for lead, and is looking very promising to make an early improvement as we drive south on its course, which will now be done. It produces more lead, and has a better appearance than in the cross-cut at the 26. In the 26 south the lode is 3 feet wide, producing 3 cwts. of lead per fathom; the same level north and the cross-cut west are as last reported. We have suspended the 26 south on eastern part of the lode, and put the men to stope the back, which is yielding 4 cwts. of lead per fathom: Williams's stope in back of this level is worth 4 cwts. per fathom. The ground in the winze in bottom of the 14th south continues good, and produces stones of lead. The ground in the shaft is a little harder for sinking. No alteration in any other point. We sample to-day 14 tons of lead ore.

EAST LAXEY.—R. Rowe, Feb. 14: No. 2 lode, in sinking below the adit, continues to improve in size and appearance; it is now 2 ft. wide, with more of the ore-bearing quartz in it than we have seen before, mixed with jack and lead. The heavy snow has interfered for the time with our surface operations. As soon as the east and west lode is again intersected in the new place westward, and near the No. 2 north and south lode, we shall decide the situation for sinking a shaft for proving this new lode.

EAST ROSEWARNE.—J. James, Feb. 16: In Hallett's shaft the lode is 9 in. wide, worth 8*l.* per fm. We have suspended the 75 east for a short time, and put the men to hole a piece of ground from the 65 to the tributers' working for ventilation; when this is done we shall resume the driving at once, as it opens tribute ground. In the 75 west the lode is small and poor. The stopes in the back of this level are producing their usual quantity of ore. In King's shaft the lode is 18 in. wide, worth 22*l.* per fm.; the north dropper referred to in former reports has fallen into it, and improved it. In the 65, west of King's, the lode is 15 in. wide, worth 25*l.* per fm. The average value of the stopes in back of the 65, east and west of King's, is about 14*l.* per fm., but the lode at one point for several fathoms in length is worth 80*l.* per fm. Our progress in building the steam whim-house is very slow, the weather being so bad that the masons can only work a day occasionally.

EAST SNAEFELL.—R. Rowe, Feb. 14: The lode in the deep adit continues in what is termed a "nip," a circumstance of continual occurrence in Great Laxey Mine, but the ground around it is bursting with water from every point, showing that there is open ground and a wider lode ahead of us. In the shallow adit we are now about 5 fms. off the junction with the cross lode. The heavy fall of snow this week has stopped the open cutting in No. 2 lode.

EAST TRESKERBY.—J. Nancarrow, Feb. 14: The ground in the 12 east has improved for driving; the lode is small, but yields a little copper. The stope in the back is worth 5*l.* per fathom. The stope in the back of the 12 west is worth 4*l.* per fathom. The stope in the bottom is worth 12*l.* per fathom. The lode in the rise above the 30 is 2 feet wide, and is improving, now worth for tin and copper 4*l.* per fathom. The ground in the 30 cross-cut north is harder than last week, and still very wet. In the 30 east the ground is easier for driving; the lode is 1¼ ft. wide, worth for tin and copper 5*l.* per fathom. The weather being very severe is much against dressing.

EAST WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Feb. 15: There is no change in the lode in the engine-shaft sinking below the 75. The lode in the 75 east is 15 in. wide, containing stones of ore, and looking more promising. The lode in the 75 west is full 5 feet wide, and yielding 6 tons of good ore per fm.; a fine-looking lode—in fact, we do not ever remember seeing a finer lode in this mine. The lode in the 65 west is much the same as before advised. The lode in the stope above the 65 is worth for ore and tin 15*l.* per fm. The lode in the stope below the 65 is yielding 6 tons of ore per fm. The lode in the stope above the 55 west is worth 12*l.* per fm. No other alteration.

EAST WHEAL LOVELL.—J. Burgan, Feb. 16: The south lode continues in character and size, worth 90*l.* per fathom. The cross-cut driving towards it from the north lode has moved with good progress this week. The plat on the north lode will be finished by the end of next week, when we shall proceed with sinking below the 40 in the new shaft. The inclemency of the weather has completely stopped the surface arrangements for the turnpike shaft lode. We purpose driving east at the 26, on the north lode, and for that purpose we have removed the old pitwork from Burgan's shaft. In taking down the lode in new plat some granite has been met with, which has disarranged the lode.

EAST WHEAL RUSSELL.—J. Goldsworthy, Feb. 15: At Homersham's shaft, sinking below the 130 fm. level, the ground continues favourable, good progress being made. In Soper's cross-cut, driving north in the 130 fathom level east, the ground is improved, better progress is being made; by the character of the strutum, the wall of the north lode is not far off. In the rise the back of the 130 fm. level, east of Soper's cross-cut, the lode is 4½ feet wide, worth 12*l.* per fathom. In the 130 fm. level, east of Soper's cross-cut, the lode is 4 feet wide, composed of quartz, prian, flookan, mundic, and copper ore, worth 8*l.* per fathom. In the 120 fm. level, driving west of Maynard's cross-cut, the part of the lode being carried is 4 ft. wide, composed of capel, iron, quartz, mundic, and producing stones of copper ore. In the 77 fm. level, west of Northey's cross-cut, the lode is 3½ ft. wide, of a kindly appearance. In the 45 fm. level east there is no change to notice since last reported upon. In the 88 fm. level, west of Hitchins's engine-shaft, there is no change in Williams's cross-cut, driving north, since last report.

EAST WHEAL TOLGUS.—Feb. 15: Redruth Consols Lode: In the 34, east of John's shaft, the lode is 2 ft. wide, composed of capel, spar, and killas. The ground in the 34 fm. level cross-cut south is hard and spare.—New Lode: In the adit level, west of the cross-cut, the lode is 18 in. wide, consisting of gossan, spar, and mundic; it was heaved by the cross-course 3 fms. south.—New South Lode: In the adit level, west of the cross-course, the lode is 2 ft. wide, consisting of spar, killas, and mundic. The ground in the adit level cross-cut south is moderately easy.

EAST WHEAL VOR.—J. Pollard, Feb. 15: The shaftmen are engaged to-day fixing penthouse. The sinking will be resumed to-morrow for the 90 with all possible speed. The 70 west is much the same as last reported.—Smith's Lode: In the 60 east we have a strong, kindly lode, yielding a little tin, and letting out large streams of water; in the same level west the ground is favourable for driving, but not any change in the lode to notice. Our engine and pitwork in good repair, working eight strokes per minute.

FURSDON.—J. Collins, Feb. 16: The part of the lode which was standing in the side of the level in the 21 west is being taken down, which shows a little improvement. We shall be ready to commence driving through the cross-course in a day or two. It appears we shall have to cross-cut north to find the lode west of cross-course. There has been nothing done to value in the cross-cut south, in the 11 fathom level, this week, the men being employed in repairing the timber in the adit level and shaft. The pitches are yielding the usual quantity of ore. The severe frost and snow are hindering our progress in dressing.

FURZE HILL WOOD.—Wm. Doidge, Feb. 13: Since last report our progress in the engine-shaft has been slow, in consequence of so much surface water going down, and a large stream coming from the 40 cross-cut.—No. 1 North Lode: In the 40 east the lode is 2 ft. wide, composed of capel, spar, and peach, worth 3*l.* per fm. for tin. The western stope in the back of this level is worth 4*l.* per fm. The eastern stope in the back of this level is worth 6*l.* per fm. In the 40 cross-cut north we have cut through something that resembles No. 2 north lode; it is composed of capel, spar, and a quantity of mundic, but the main distance between Nos. 1 and 2 not being driven, we intend to drive on a few fathoms further to prove whether there is any more lode ahead or not. At surface our engine and stamps are working well, but the severe frost has in some measure impeded dressing operations.

GARLIDNA UNITED.—J. Rowe, Feb. 15: The lode in the Burning-house shaft is improving in size and quality; the lode is 5 ft. wide, all stamping work. We have intersected the lode in the south cross-cut; it contains good work for tin, but not being clear of the cross-course we cannot say anything about its value. We shall be able to report more fully next week.

GAWTON COPPER.—G. Rowe, Feb. 11: We are now cross-cutting the lode in the 36 west, where it is laid open full 10 ft. wide, and not yet through it; the ore-bearing part, so far as seen, is 15 in. wide, worth about 2 tons of ore per fm. The ground in the 50 cross-cut, north from engine-shaft, has improved for progress, being extended 10 fms. 5 feet from the shaft.

GREAT BRIGAN.—J. Tredinnick, Feb. 16: The ground is becoming more favourable in the 10 fm. level cross-cut, driving south of the new shaft, and looks more like the ground in the level above by the side of the lode. The lode in the deep adit level, driving west of the above shaft, is split by a small cross-course. I believe these cross-courses will be feeders to the lode at deeper levels. The lode in the winze sinking below the deep adit level further east is worth for copper ore 8*l.* per fm. The lode in the deep adit end, driving east of cross-cut, is worth 5*l.* per fm. No alteration in the cross-cut, driving south of Highburrow shaft, at the 20. In the winze sinking below the 32, west of the western shaft, the lode looks well, and is worth for copper ore 20*l.* per fm. We are getting on as fast as possible in driving the cross-cut north to intersect the same lode at the 42.

GREAT DEVON AND BEDFORD (Colcharton).—J. Richards, Feb. 15: The sinking of Chenhall's engine-shaft below the 40 fm. level is steadily progressing, but not so fast as I could desire, in consequence of the ground being so unfavourable. There is no change in the lode at the 40, driving east or west, since my remarks last week. I am proud to inform you of a decided improvement, of an important character, in the lode at the 30, driving west, to-day. I am glad to say that the same will produce fully 2 tons of yellow copper ore of good quality per fathom, and indicates every appearance of further improvement. As soon as the weather changes I would advise the dressing-floors to be laid out, as I am convinced they will be shortly required.

GREAT LAXEY.—J. Kitto, Feb. 14: In the 60, driving south, the prospects during the month has somewhat improved; the lode in the present forebreast is 4 feet wide, and worth about 60*l.* per fathom. The stopes in the roof of this level are also looking better for lead, and are now worth 100*l.* per fathom. The 90 end has some nice copper in it, but is not rich. The stopes in the south part of mine are yielding about an average quantity of copper. The sump sinking below the 145 is worth 60*l.* per fathom for lead and copper, and the rise in the roof of the 165 is worth 6 tons of copper to the fathom. We are pushing on the 190 towards the copper ground, and have from 10 to 15 fathoms further to drive before we expect any favourable change. In the north part of the mine the prospects are still very encouraging. The 210, driving north of the Welsh shaft, is greatly improved, and, in fact, much sooner than we ever anticipated; the lode in this level for some time past has been in two parts, which have now come together again, and a decided improvement both in character and value has been the result. The end is now worth full 40*l.* per fathom. The 200 end north is at present poor, but we are daily expecting an improvement. The 190, 180, and 165 ends continue about the same as they have been for a considerable time: the lode in the latter two is from 6 to 8 feet wide, principally jack, with a little lead through it. The stopes in the roof of the 165 are worth on an average about 80*l.* per fathom. We have suspended the driving of the 145, on the east lode, for the present, and have commenced to sink a sump below to communicate with the 155 for the purpose of ventiliation, and for opening out the ground for stopes; lode in the sump 4 feet wide, and worth 60*l.* per fathom. The lode in the 130 is large, but at present poor. In the 120, driving north from the cross-cut, we have lately passed through another part of the slide, since which the lode has begun to open out wider, and looks much more promising. The 110 cross-cut, driving to cut the east lode, is progressing favourably, and will, no doubt, intersect the lode in the course of another month. In the 110 north the prospects were never more encouraging, the lode in the end is still very good, and the stopes in the roof never at any time looked better. In the one nearest the end the lode is 12 ft. wide, and worth upwards of 200*l.* per fathom; and in another, to the south of this, 6 ft. wide, and worth 120*l.* per fathom. These stopes together are about 20 fathoms in length, and the end 5 fathoms further in advance. At Dumbell's the lode in the sump, sinking below the 70, is daily improving, and is now worth about 80*l.* per fathom; this sump is almost immediately over the 110 end just referred to. The 70, driving north of the sump, is worth 30*l.* per fathom. The end driving south from the sump is poor but the stope in the roof a little behind the end is worth 40*l.* per fathom. In the new trial levels at Glenfoss and Glenroy there is nothing special to notice since last report, notwithstanding the prospects, on the whole, are rather more encouraging

GREAT NORTH DOWNS.—J. W. Crase, M. Jenkin, Feb. 15: At Vivian's engine-shaft the water is now drained 6 fms. below the 57, and at present things are going on well; we thought before this to have had the water out from the bottom of the mine, but, in consequence of our bucket-rod breaking, our expectations have not been realised; on account of this nothing has been done in bottom of the mine since our last communication. The lode in the 57, west of engine-shaft, is 2 ft. wide, producing stones of copper ore. The lode in the 57, driving east of Jenkin's shaft, is 3 ft. wide, worth 7*l.* per fm. The water in the eastern part of the mine continues to go down, and we hope soon to be able to resume operations in the productive ground in that part of the mine. We have sampled to-day 177 tons of copper ore, which but for the water being in the bottom of the mine would have been quite 230 tons.

GREAT NORTH LAXEY.—R. Rowe, Feb. 14: The lode in the engine-shaft is not quite so large, it is now about 2 feet wide; this bunch of ore is clearly dipping to the north, and away under the ground hitherto quite unproductive above. In the north end of the shaft the lode is 2½ feet wide, and worth fully 2 tons of lead to the fathom. I am glad to see this defined tendency of the ore to the north in depth: every bunch of ore of any note in Great Laxey has invariably taken the same direction. The lode in the 60 fathom level end, driving south, is 3 feet wide, and much improved in its general appearance, and increased in value from ¼ ton to 1 ton of lead per fathom, besides being mixed with blende and ore. There is no change this week elsewhere.

GREAT RETALLACK.—Wm. H. Reynolds, Feb. 15: No alteration in the adit end since my last. We are making good progress in sinking No. 8 adit shaft.

GREAT SOUTH TOLGUS.—John Daw, Feb. 15: Friday last was setting-day. Very little has been done in the 166 west during the past week, owing to the increase of water. In the 154, east of Lyle's shaft, the lode is 3 feet wide, producing 5 tons of copper ore per fathom; driving by six men, at 10*l.* per fathom. About 5½ fathoms behind the end we have commenced to rise in the back of the level, where the lode is 2 feet wide, producing 2 tons of ore per fathom; rising by four men, at 6*l.* per fathom. The lode in the winze sinking below the 154 is 1 foot wide, producing good stones of ore; sinking by six men, at 9*l.* per fathom. In the 154, west of Lyle's shaft, the lode is 2 feet wide, producing a little tin; driving by four men, at 4*l.* per fathom. In the 140 west, on the tin lode, the lode is 3½ feet wide, worth 7*l.* per fathom; driving by four men, at 5*l.* 8s. per fathom. In the 125, west of Lyle's shaft, the lode is 1 foot wide, unproductive; driving by four men, at 4*l.* 4s. per fathom. In the 125, east of new shaft, the lode is small, and disordered by the cross-course; driving by three men and three boys, at 4*l.* per fathom. In the 100, east of Noel's shaft, we have commenced to rise in the back; the lode is 1 ft. wide, composed of spar, peach, mundic, and stones of copper ore; rising by four men, at 4*l.* 10s. per fathom.

GREAT WHEAL BADDERN.—R. Pryor, H. Tregoning, Feb. 11: The ground in the 75 cross-cut, north of Hill Brothers shaft, is a little harder for driving, and judging from present appearances we think we are near the elvan course at this point. The ground in the 63 cross-cut, south of this shaft, continues much the same as when last reported, which is still strongly mineralised with mundic, blende, and spots of lead, letting out water freely. We have within the last two or three days met with an increased quantity of water in the 20 cross-cut, south of Burgan's shaft, and the ground containing a large quantity of spar, impregnated with spots of copper ore and mundic, which we consider to be a favourable indication. The tin ground on tribute and tutwork continues much the same as for some time past, but we are sorry to say, owing to the late heavy falls of rain, we have not yet been able to drain the water from the 25. Our pumping and stamping engines with pitwork are now in good working order, and with a little more repairs to the condensing department of the stamping-engines it will be in thorough repair, which will shortly pay for itself in saving of coals, &c.

GREAT WHEAL BUSY.—John Edwards, J. Tredinnick, C. Bawden, Feb. 11: At Offord's shaft the men are engaged cutting plat in the 140, where the lode is worth 20*l.* per fathom for tin and copper ore. In the 140, driving east of said shaft, the lode is 4 ft. wide, worth 12*l.* per fm. The lode in the 140, driving west of Offord's shaft, is 4½ feet wide, worth 8*l.* per fathom. The lode in Nos. 1 and 2 stopes in back of the 140, east of Harvey's engine-shaft, are worth respectively 8*l.* and 16*l.* per fm. for tin and copper ore. The lode in No. 1 stope, in bottom of the 130 east, east of Offord's shaft, is worth 30*l.* per fathom for copper and tin. No. 2 stope in bottom of the said level is worth 12*l.* per fm. The lode in the 130 east end is 15 in. wide, worth 5*l.* per fm. for tin. The lode in the 110, driving east of Mathew's shaft, is 3 ft. wide, worth 6*l.* per fm. for tin. The lode in the 100, driving east of said shaft, is 4 ft. wide, worth 15*l.* per fm. for tin. The lode in the 90 end, driving east of Mathew's shaft, is 4 ft. wide, worth 12*l.* per fm. The lode in the winze in the bottom of this level is worth 10*l.* per fm. for tin. The lode in the 80 end, east of said shaft, is 4 ft. wide, worth 15*l.* per fm. for tin. At Walker's shaft, sinking below the 70, the lode for the part carried, 10 ft. long by 6 ft. wide, is worth 12*l.* per fathom. At Walker's shaft, rising in back of the 70, the lode is worth for the part carried, 10 ft. by 6 ft., is worth 20*l.* per fm. The stope in the back of this level is worth 12*l.* per fm. for tin and copper ore. The lode in the 50, driving east of Mathew's shaft, is 3½ ft. wide, worth 10*l.* per fm. for tin. The lode in Walker's shaft, sinking below the 36, is 5 ft. wide, worth 6*l.* per fm. for tin. The ground in the 36 cross-cut, south of said shaft, is still favourable for driving.

GREAT WHEAL VOR.—Thomas Julian, F. Francis, S. Harris, Feb. 15: Ivey's shaft is in full course of sinking, down about 10 feet below the 162; the lode is about 4 feet wide, worth for the length of the shaft (14 feet), 40*l.* per fathom. In cutting ground for tip-plat, east from this shaft, it is necessary to take away all the lode, which is 4 ft. wide, and worth for the length of the plat (12 feet), 40*l.* per fathom. The lode in the 162, east of Ivey's, is 2 feet wide, worth 70*l.* per fathom. The 162 west is worth 90*l.* per fathom. The 157 east is worth from 15*l.* to 20*l.* per fathom. The 157 fathom level west is worth 50*l.* per fathom: we expect an improvement in this end very shortly. The 147 fathom level west will be resumed in a day or two. The winze sinking below this level is not sufficiently deep to prove the value of the lode below the slide, but from the nature of the ground we have every reason to expect the lode will prove as productive as above the slide. The 100 west is much as last reported. Wheal Metal shaftmen are now engaged in fixing plunger-lift, which will soon be finished, and the shaft resumed sinking with all possible speed. The 184, east of this shaft, is worth 15*l.* per fathom. The 184 west is worth 30*l.* per fathom. The 174 east is worth 100*l.* per fathom. The 174 west is improved, worth 20*l.* per fathom—a very promising end, and we fully expect a still further improvement. The rise in the back of this level is worth 40*l.* per fathom. The 162 east is worth 12*l.* per fathom. The 162 west is also looking much better; the floor of spar has entirely worn out; the lode is now worth 20*l.* per fathom. The rise in the back of this level is worth 30*l.* per fathom. There is no change in the stopes. The whole of the machinery is working well.

GRYLLS WHEAL FLORENCE.—Edward Rogers, Edmund Rogers, Feb. 14: At the 12, driving east of engine-shaft, the lode is still maintaining its size, being 6 ft. wide, worth 8*l.* per fm.; at this level, driving west, the lode is 4 ft. wide, worth 4*l.* per fm.

GWYDYR PARK CONSOLS.—Wm. Smyth, Feb. 15: No change in Gwyn Lliflon adit end since last report. No change in Gwydyr stope or middle level; we will take down the lode here next week. We have not been able to dress anything for the month, in consequence of the frost and snow. We have a heavy fall of snow on the ground, and it is freezing very hard.

HALLENBRAGLE.—E. Richards, R. M. Kitto, Feb. 13: The engine-shaft is sunk 7 fms. 6 in. below the 44; ground harder for sinking; lode 18 inches wide, letting out a quantity of water, but not sufficient to drain the lode from east of engine-shaft. Stone's shaft and all the winzes are suspended in consequence of the eastern water. The lode in the 40, driving west of engine-shaft, on the north lode, is producing stones of copper ore. All operations on Reed's lode, in the south part of the mine, are suspended in consequence of water. We have set several pitches, varying in tribute from 7s. to 13s. 4d. in 1*l.* The water has gone down in the old engine-shaft during the past week about 1 ft; we hope as the floods decrease it will go down in other parts of the mine.

HARWOOD.—J. Race, Feb. 11: They have risen about 3 ft. in the limestone in the new vein at Scar Head; it is a strong vein, with black iron riders mixed; a little ore at present, but likely to be above. The drift going east in the other vein is worth 1 ton per fathom at present, and looks like an improvement. The end west of No. 3 rise is poorer at present. No alteration in Trough Low level.

HAVAN.—G. Jones, Feb. 14: Sheldon's shaft is repaired and cleared down 20 fms. from surface. I hope with the good progress made here we shall soon see the bottom of the shaft. All surface operations are stopped owing to the severe frost, &c.

HAWKMOOR.—J. Richards, Feb. 14: The stopes in the 25 east are worth 1 ton of copper ore per fm.—West Hawkmoor: The cross-cuts north and south are progressing favourable. The stopes in back of the adit level, on No. 3 lode, are producing some good work for tin ore.

HINGSTON DOWN CONSOLS.—T. Richards, Feb. 15: Bailey's engine-shaft, sinking below the 120, is worth 60*l.* per fm. (for the length of 13 feet). The 120, east of Bailey's engine-shaft, is worth 20*l.* per fm. The 120, west of Bailey's, is not so productive; the lode contains more capel; present value 25*l.* per fm. The 110 west is worth 20*l.* per fm. The 85 west is worth 18*l.* per fm.

KELLY BRAY.—G. Rowe, Feb. 15: The lode in the 70 east is 2½ ft. wide, composed of mundic, prian, and occasional stones of ore. The ground in the 60 fm. level cross-cut north is at present hard, and spare for progress, with an increased quantity of water issuing from the end. We have intersected some hard floors of spar in the new whim-shaft, which has impeded our progress in sinking during the last few days, which we regard as temporary, including the very unfavourable state of the weather for such surface operations. The ground in the rise in back of the 25, against new shaft, is moderately easy, and our progress very satisfactory; the lode is about 18 in. wide, composed principally of gossan and quartz. The lode in the stopes in bottom of the 25, west from winze, is not looking so well going back towards the old workings as we anticipated; we, therefore, propose to discontinue all operations beneath the 25 until the new shaft is communicated therewith.

LADY BERTHA.—Capts. Harper and Metherell, Feb. 13: The lode in the new shaft, sinking below the 41 east, is improved in character and size, now being nearly 4 feet wide, composed of capel, peach, mundic, and ore, saving work, and likely from present appearances for further improvement.

LANIVET.—J. Tregay, Feb. 11: Petrie's: In the 20 east the lode is 6 ft. wide, and yielding fair quality tinstuff.—Account-house Shaft: The stopes here are producing saving work for tin. The lode in Oulton's stope is 5 ft. wide, producing good quality work for tin. The tributers are working in good spirits, and earning good wages.

LEAWOOD.—J. Daw, Feb. 15: We are in fork 2 ft. below the 19, and can see the bottom of the run. We are busily engaged in securing the same. We hope in a week from this time, if nothing goes amiss, to get the shaft pretty secure.

MAUDLIN.—J. Tregay, Feb. 11: Old Mine: The sumpmen have been engaged this week in fixing a penthouse and casing down the shaft from the 60 to the 70. The end in the 70 east is still in gossan, with some good grey copper ore, and letting out a quantity of water; in this level west the lode in the rise is worth 20*l.* per fm.—West Mine: The shaftmen have been engaged this week in fixing the bottom lift for sinking and putting in new rods.—Coombe: No lode cut yet.

— J. Tregay, Feb. 16: The lode in back of the 70 east is worth 60*l.* per fm. The lode in the 70 east end is letting out much water, and we expect an improvement.

MINERA.—W. T. Harris, Feb. 16: Brabner's shaft, in the 80

dacing good stones of ore, at times a kindly lode; this shaft will soon be down to the depth for a 12 fm. level. The two stopes over the deep adit level are yielding 10 cwts. of lead ore per fm. The timbering and repairing of the engine-shaft, from the deep adit to the roadway level, is now nearly completed, and we shall commence to fix the line of rods in that level almost at once.

NETHER HEARTH.—Wm. Vipond, Feb. 11: We have got the down cheek of the limestone in the rise, but no change—in fact, I do not look for it until we have limestone on both sides. From the throw of the vein in the level I think we cannot be more than 2 feet from it.

NEW CLIFFORD.—J. Mitchell, Feb. 16: We are pushing on the shallow adit level towards Holland's new engine-shaft as fast as possible. In consequence of the very heavy rains, and increase of water, we have not been able to make the progress we first anticipated. We have 4 fms. more to drive to reach the shaft, and when accomplished we shall resume sinking the same with vigour. As soon as the weather is sufficiently improved, I intend placing two pares of men to drive east and west on Gooley's lode, which we cut a short time since in the marl or clay pit, about 20 ft. from surface; at its intersection, so far as we have yet seen, it is worth about 30*l.* per fm. for tin. One of the most favourable indications that could possibly be met with on the backs of a copper lode in this district, it can be taken away for 20s. per fathom.

NEW CONCORD SILVER-LEAD.—Thomas Foote, Wm. Snell, Feb. 13: We have cleared the 28 west to the end, where the lode is about 2¼ ft. wide, but hard and poor. This lode being driven a distance of 66 fms. from the shaft, or cross-cut, we shall not do anything here at present. We have placed the men that were clearing this level to put in timber at the shaft from the 38 to the 50, so as to get everything in order for sinking the shaft under that level. The lode in the 38 east is still yielding mundic, but not producing any ore. We have suspended the rise in back of the 20 west, owing to the lode being poor. Nothing new in any other part of the mine.

NEW CROW HILL.—W. Treloase, Feb. 14: It was our measuring and setting day on Saturday, and the following are the particulars thereof:—The 55 end measured 3 fms. 2 ft. 6 in., and is for the present idle for want of suitable hands to drive it; this end is still showing a large strong lode, with an excellent footwall and a good underlie, with plenty of mundic, jack, &c., and a little ore. The stopes in back of the same level measured 14 fathoms 1 foot, and are re-set to the same pare (six miners and six labourers) for the month, at 20s. per fathom, with 3*l.* per ton for ore, and 2s. per ton for mundic; the lode here has somewhat further improved, and is worth 8 cwts. of ore per fathom, with 2 tons of mundic, for the whole length of the stopes (20 fathoms) and is a splendid looking lode, the average width being 5 feet, with a beautiful footwall, and the underlie 1 foot per fathom. The cross-cut at the 70, west of shaft, measured 3 fms., and is re-set to six men for the month, or cut the lode, at 3*l.* 10s. per fm. The cross-cut east at the same level is let to six men, at 5*l.* per fm. for 5 fathoms, or the month. All the tramming at the 55 let to two men, at 14s. per 100 kibbles. All the kibbles filling in the mine at 3s. 9d., and the landing at 3s. 6d. per 100 kibbles.—Wheal Louisa: Everything here is going on well. The clearing up of the engine-shaft for the past month amounts to 6 fathoms 1 foot, besides clearing the 20 plat which was also full, and 8 fathoms of the 20 cross-cut, the latter only partially filled up, and the shaft is now down and made good 4 fms. 4 ft. below the 20, and is re-set to six men (stented to the bottom), at 3*l.* per fathom. We are drawing to quay the 80 tons of mundic sold, and shall have about 150*l.* worth of lead ore to meet our next pay.

NEW PEMBROKE.—F. Puckey, J. Puckey, Feb. 13: There is no alteration in the 45 end, driving east on the north lode, since the adventurers' meeting. The lode in the end is 2 feet wide, and still of a very kindly character, composed of quartz, prian, and peach, and producing a little tin, but not sufficient to pay for working. The lode in the rise in back of this level, east of the cross-cut, is 1½ ft. wide, containing a little tin, and good stones of copper ore, worth 8*l.* per fm.; cost for rising, 3*l.* per fathom. In the same level, east of the cross-cut, on the middle lode, the lode is increasing in width, and is now 2 ft. wide, composed of quartz, peach, and mundic, and occasionally producing a little copper ore, but not sufficient to value; cost for driving, 3*l.* 10s. per fm. In the 60 cross-cut, south of the engine-shaft, the ground is favourable for progress; cost for driving, 3*l.* 5s. per fm. In the 60 cross-cut, north of the same shaft, the ground is much the same; cost for driving, 7*l.* per fm.

NEW ROSEWARNE.—E. George, W. Mitchell, Feb. 15: The lode in the 84, east of Bickford's shaft, is 5 feet wide, worth 4*l.* per fm.: the lode in the same level west is 3 feet wide, worth 7*l.* per fathom. The lode in the 74, west of Bickford's shaft, is 6 feet wide, producing some good work for tin; the lode in the winze sinking below this level is 6 feet wide, worth 20*l* per fathom. The stope in back of the 74 is worth 20*l.* per fm.; the stope in back of the same level, west of winze, is worth 10*l.* per fm. The lode in the 67 west is 4 ft. wide, at present poor. The lode in the 58 west is 4 feet wide, producing good stones of copper ore; the stops in the back of this level, east of winze, is worth 15*l.* per fm.; the stope west of winze is worth 30*l.* per fm.

NEW TRELEIGH.—S. Michell, Feb. 16: The lode in the 90 end is not looking so well; the stope in the back is worth 6*l.* per fm., and in the rise worth 5*l.* per fm. The two stopes in back of the 80, west of Carr's engine-shaft, are each worth 5*l.* per fathom. No other change in this part of the mine to notice to-day. I have just come up from underground at the new shaft, and am very much pleased with the appearance of the lode in the bottom of the shaft going down below the 26. There are strong indications of something important near that point. In cutting the plat at the 26, west of the shaft, we found the lode to improve, and at the present time it will pay the expense of driving.

NEW WHEAL MARTHA.—G. Rickard, Feb. 16: We have made good progress in cross-cutting the south part of the lode in the 86 fm. level; so far as seen it is 7 ft. wide, consisting of capel, fluor-spar, and arsenical mundic, disseminated throughout with yellow copper ore. The lode in the 74 west has a more promising appearance than stated in last week's report; the horse of killas appears to be wearing out, and the north and south parts will be united in about 6 ft. further driving, when we may expect a change for the better. The lode in the 64 west is still looking very promising, producing copper ore to the value of 16*l.* per fathom; this end has laid open good tribute ground for the last 10 fathoms driven. The stopes in the bottom of the 52, east and west of No. 1 winze, is without change to notice, worth from 35*l.* to 40*l.* per fathoms. Very little has been done in the 40 west since last week, as the men have been engaged in dividing and casing the winze, putting in footway, &c., which we hope to accomplish by to-morrow night. The stopes east and west of No. 2 winze, in the 30 fm. level, is worth full 25*l.* per fathom. The ground in the cross-cut, towards the north part of the lode, in the 20 fm. level, is of a favourable character for the production of copper ore.—Tribute Department: Sleep's pitch, in the back of the 74, is not looking so well as it did last week, worth about 8*l.* per fathom. Sprague's pitch, in the back of the 52, is worth full 10*l.* per fathom. Rapson's pitch, in the back of the same level, is worth 15*l.* per fathom. Richards's pitch, in the back of the 40, is worth from 15*l.* to 20*l.* per fathom. Dingle's pitch, in the back of the 30, west of No. 1 winze, is worth 15*l.* per fathom, with an improving appearance. Howell's pitch, in the back of the 20 fm. level, is worth full 10*l.* per fathom. Grist's pitch, in the back of the 10 fm. level, east of Thomas's shaft, is improved since last week, worth 14*l.* per fathom. The engine and pitwork are in good working order, and keeping the water at present in perfect control.

NORTH BULLER.—R. Pryor, H. Harvey, Feb. 11: New South Lode: We have this day taken down the lode in the 100 end, east of cross-cut, and find it to be 15 in. wide, composed of mundic, peach, blende, and rich stones of copper ore, but not sufficient of the latter to value; the end is letting out more water than usual, which we consider to be a favourable indication.

NORTH CHIVERTON.—J. Hampton, Feb. 14: The 5, east of old engine-shaft, is producing 1¼ ton of blende per fm., although only a portion of the lode is being carried. This level is fast improving, and will soon by producing large quantities of blende. The 8 west is also improving, and is worth at lest 1 ton of blende per fm. The leader part of the lode is 15 in. big, and the end is getting into the productive ground gone down from the more shallow level. In the deep adit level we are driving another cross-cut north to cut the casnter lode, and the result will doubtless be good. The pitches in back of the 20 are generally improved, the eastern one very much so. The 20, east of little engine-shaft, is worth 4*l.* per fm. for lead, but so large is the lode that only a portion of it can be carried in the end. The 20 west is exceedingly promising, for lead especially; small branches and good stones of lead are being met with, and the lode, which is all the end big, is very compact. The stopes in back of this level are worth from 1½ to 2½ tons of blende per fm., and occasionally good squats of lead are met with. In back of the 12 we are stoping Shepherds lode, which is worth from 12*l.* to 20*l.* per fm. for lead. The whole of this lode has not yet been seen below the 12, but will be laid open by crosscuts, and, when seen at the depth where large quantities of lead have been hitherto found in this district, I really believe the run of lodes will be highly remunerative.

NORTH CHIVERTON.—J. Hampton, Feb. 16: We have got into the lode at the 5, east of old engine-shaft (the bottom level), about 4 ft.; so far as can be seen it is the best lode for blende we have yet discovered; I can say nothing about the size of it, but as soon as we find the south wall I will send full particulars. I expect, however, the whole of the lode will produce several tons of blende per fathom.

NORTH DOLCOATH.—Capts. Vivian and Paull, Feb. 15: Since the last report we have cased and divided the engine-shaft from the 70 to the 85, and should now be driving the latter towards the cross-course but for a leakage having occurred in the steam-engine boiler, which has compelled us to stop the engine. We find that the boiler will require some three or four new plates, and it will probably take us all this week to repair and overhaul it. As it will take us some days after the engine has been again set in motion to draw the water to the bottom level, we shall employ the sumpmen in the meantime in exploring at the adit level.

NORTH MINERA.—Feb. 16: Saturday last being our setting-day, the following bargains were set:—The 40 to drive south-west, by four men, at 8*l.* per fm.; in driving this end we have cut into a bed of shale, which will disorder the lode, but I have no doubt we shall find it again when we get through the shale. The 40 to drive north-east, by four men, at 7*l.* 10s. per fm.; this end is looking very kindly, with a lode about 4 ft. wide, composed of bastard limestone, carbonate of lime, and some good stones of lead ore: larger stones of ore were broken here this morning than have been seen in the 40; I anticipate an improvement here shortly. The 15 to drive north-east, by two men, at 6*l.* per fm.; this level is looking promising, with a lode about 5 ft. wide, composed of calc-spar, and spotted throughout with lead ore. The shaftmen are getting on very well with the sinking of the shaft; the ground is of the same character as last reported.

NORTH POOL.—J. S. Phillips, James Pope, Feb. 11: The engine-shaft is being sunk by a full pare of men, at the month's price of 25*l.* per fm., in killas, which contains unusual quantities of quartz. The deep adit cross-cut is being driven north in killas, at 4*l.* 15s. per fm., and the killas layers, and percolations of water, still indicate approach to a lode. This level is also being driven south on cross-course at 3*l.* per fm., and the killas stratum shows great similarity to that passed through from Ballarat westwards, and towards this end on the north, and over this expected lode, some 120 fms. east of this in the adit level, is being advanced from the old mine for future drainage from the new engine-shaft. The various machinery for attachments to the 60-inch engine is nearly completed, and the Ballarat shaft will be drained to the 24 under adit, and, after the present pumps are replaced by permanent plunger-pumps, this shaft will be sunk simultaneously with the engine-shaft in the deeper sections of ore ground of this western wing of the old mine.

NORTH SHEPHERDS.—H. Bennetts, Feb. 15: The lode in Decimus engine-shaft is 2½ ft. wide, composed of lead, flookan, mundic, and white iron, and very much more promising than for some time past; the shaft is sunk 7 fms. below the 20. The lode in the 20 end, west of engine-shaft, is very much improved in value, and is now producing rich work for dressing; the south branch is looking well, and I have great reason to believe a good lode will be met with in driving the 30 west, where the shaft is down to the 30 fm. level. In the same level, east of shaft, the north and south lode is looking much more promising than was ever seen in this mine before; the lode is composed of soft spar and mundic, with a little lead, but on the whole a very promising lode indeed.

NORTH WHEAL BASSET.—W. Roberts, Feb. 15: The following tutwork bargains were set on Friday, the 10th inst.:—The 122, to drive west from Grace's shaft, by eight men, at 5*l.* per fm.; the lode is 1 foot wide, saving work for tin. The 112 west, by four men, at 5*l.* 10s. per fm.; lode 3 ft. wide, all saving work for tin. The 102 west, by four men, at 6*l.* per fm.; lode small.—South Lode: The 102 west, by two men, at 6*l.* per fm.; lode 3 feet wide, producing a little tin.—North Lode: The 42 to drive east from cross-cut, by six men, at 7*l.*; lode 2 feet, wide, composed of spar, mundic, and a little copper ore. The 32 east, by four men, at 5*l.* per fm.; lode 1¼ foot wide, at present unproductive. A rise in the back of the 32, by two men, at 6*l.* per fm.; lode 1 foot wide, producing stones of ore. The 20 to drive east by two men, at 4*l.* per fm., lode small; the same level west, by two men, at 3*l.* per fathom; lode 1 foot wide, with occasional stones of ore. A winze to sink under the 20, by four men, at 7*l.* per fm.; we hope to hole this winze to the rise in back of the 32 in the course of a few days, which will open tribute ground.

NORTH WHEAL ROBERT.—Wm. Godden, Feb. 16: West of Murchison's Shaft: The ground in Waymouth's cross-cut north, in the 30, is not so easy for progress, which has hindered us from reaching the lode before. We have suspended the drivage of this level east, on No. 1 north lode, for a short time, and put the men to drive west of the cross-course, in the 52, to prove the south part of the main lode that has been so productive further west. Rowe's rise is now 10 fathoms above the back of the 52, on No. 4 south lode, we shall cross-cut the lode at this point the beginning of next week.—West of Trial-shaft: No. 2 south lode, in the 42 end, west of Scoble's cross-cut, is 2½ feet wide, yielding saving work. The lode in the same level, going east, is 1 foot wide, and at present unproductive, which I think is only temporary, as the lode makes in splices. In Heard's rise and stope, above the back of the same level, the lode is worth 15*l.* per fathom, which is lengthening after the ends: the ground is stoping at 1*l.* 15s. per fathom. The weather is still very severe here, entirely hindering us in our tin dressing.

OLD GUNNISLAKE.—W. G. Gard, Feb. 16: We are still driving through a splendid lode of rich gossan in the 20, west of Parker's shaft. We have set a winze to sink in the bottom of the 20, the lode in which is composed of a splendid gossan, impregnated throughout with ore; there can be no doubt we shall not have to sink far before we meet with a good course of ore. The surface operations are progressing satisfactorily.

PEDN-AN-DREA.—Wm. Tregay, Feb. 11: In the sump, in the 130 east, the stope between the winze and the shaft in the back of this level is worth 40*l.* per fathom. The 130 west is producing stones of tin. In the 130 cross-cut nothing cut in either of the cross-cuts for the week. The 120 east is poor in the end. In cross-cutting the lode in the 120 east, south of the rise, we have struck some rich work for tin, apparently a good lode, but much of it is not seen as yet. We have set six men to cross-cut as rapidly as possible; we expect this is a continuation of the course of tin in the bottom of the 110 east. In the 110 east the lode in the pitch in the bottom of this level is looking well, worth about 35*l.* per fathom. In the 100 east we are cross-cutting north and south; east of the cross-course the ground is favourable for driving. The 90 fm. level rise is worth 6*l.* per fathom.—Cobbler's: The stope in the bottom of this shaft is worth 12*l.* per fathom. The 110 east, on Skimmer's lode, is worth 5*l.* per fathom. The 100 west is worth 10*l.* per fathom. The 90 east is worth 5*l.* per fathom. The 90 west 5*l.* per fathom. The 68 east is worth 4*l.* per fathom. The 68 west is producing good stones of tin, and promising in appearance.

PENHALLS.—W. Higgins, J. Nance, Feb. 11: Engine-shaft: The lode in the rise above the 50 fathom. level, south of this shaft, continues to be worth 10*l.* per fathom. In the 50 fathom level, driving west, the flat lode is 20 inches wide, worth 15*l.* per fathom; and in the stope in the back of ditto the lode is 2 ft. wide, worth 14*l.* per fm. In the 50 fm. level, driving east on this shaft, the lode is improved, now worth 4*l.* per fathom. We have just met with a lode in the 40 fm. level cross-cut south, producing stones of tin, but have not yet seen enough of it to give its full particulars, which we hope to do in our next.—Flat-rod Shaft East—North Lode: The lode in the 30 fathom level, driving west of cross-cut, is 15 inches wide, but poor. In the stope in the back of the 10 fm. level, west of cross-cut, the lode is worth 7*l.* per fathom. The lode in the 20 fm. level, driving west, north of heave, is still worth 5*l.* per fathom; and the lode in the stope in the back of ditto is worth 11*l.* per fathom. In the 20 fathom level, driving east, north of heave, the lode is 1 ft. wide, worth 4*l.* per fathom. The lode in the stope in the back of the 20 fm. level west, south of gossan, is 2 ft. wide, worth 10*l.* per fathom. In the 20 fm. level, driving east, south of gossan, the lode is worth 6*l.* per fathom. We have no alteration to report of in the 60 fathom level cross-course, or in any other part of the mine.

PRINCE OF WALES.—W. Gifford, Feb. 14: Owing to the sharp frost we are obliged to put the men to work underground, and our surface operations are but slow for the present, as the masons and sawyers cannot work before change of weather. In the 30, east of Watson's shaft, we are driving on the side of the lode. In the 50, west of Watson's shaft, the lode is 1 ft. wide, composed principally of gossan, with occasional stones of black copper ore and arsenical mundic intermixed.

PROSPER UNITED.—S. Lean, W. Millett, Feb. 16: The lode in the 80, west of Louisa's engine-shaft, is worth 5*l.* per fathom for tin. The lode in the 70, west of Hand's shaft, is 2 feet wide, containing saving work for tin. The lode in the 60, west of Hand's shaft, will produce 4 tons of ore per fathom. The lode in the 50, west of Hand's shaft, is 2½ feet wide, composed principally of mundic. The lode in the winze sinking below this level will yield 3 tons of ore per fathom. The lode in the 40, west of last-mentioned shaft, is looking more promising, and contains some good quality ore, but not sufficient to value. All our points of operation are without change since our last report.

RHAFNA.—H. Rawson, Feb. 14: In driving the end of level C the two walls of the lode are still coming together; the lope at present is about 3 ft. wide, producing lead and blende throughout, and looking better than last week. I think I shall be ablo to hand you a better report next week. The extent of the drivage during the last fortnight is 9 ft. Our dressing is impeded by the frost and snow, but I hope this will not last long. The stope in back of level C is not looking so well as last week, but it is still yielding pretty good lead.

ROARING WATER.—Capt. Thomas, Feb. 14: the stopes on Grady's lode, west of Grady's shaft, continue a good orey lode, improving in quality, and producing more ore than usual, which looks well for a good and productive lode in depth. We cannot do so much on this lode as I could wish, the water being so troublesome, in consequence of almost continued rain; however, I hope this will now be obviated, as I have altered the mode of taking the water out of the mine. The stopes at Bush's shaft contains good stones of purple and grey ore, a very strong good-looking lode. Capt. Eddy, of the Great Cappagh Mine, inspected this mine last Friday week, and I expect you will have his special report on Thursday next.

ROBOROUGH DOWN.—T. Foote, W. Johns, Feb. 14: The lode in the 20 fm. level east is about 18 inches wide, of a very promising appearance, with a much less underlie than hitherto. We are now driving by the side of the lode; when taken down last it produced saving work for the stamps, and there is no doubt but that it will be found more productive than when last taken down. The stope in the back of this level east is yielding good work for tin, and the lode looking more promising. We are not able to do anything on our dressing-floors, owing to the very sharp weather.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, Feb. 15: During the past month the engine-shaft has been sunk 1 fm. 3 ft.; now sinking by 12 men, at 14*l.* per fm.—lode of a promising character, producing stones of copper ore. The 80, east of Ellen's, has been driven 5 fms. 2 ft.; now driving by two men, at 45s. per fathom; lode worth 6*l.* per fathom. The 80, west of Ellen's, has been driven 5 fms. 1 ft.; in this end the lode is split, and the men are now driving a cross-cut north to see if they can cut the north part of it. The 70, east of Ellen's, has been driven 3 fms. 3 ft.; now driving by two men, at 45s. per fathom; lode worth 13*l.* per fathom. The 20, east of Ellen's, has been driven 6 fathoms; now driving by two men, at 35s. per fathom; lode producing stones of ore. We have nine pitches at an average of 7s. 10din. 1*l.*; working by 31 men.

ROSEWARNE UNITED.—T. Richards, E. Carthew, W. Temby: The engine-shaft is sunk 3 fms. 3 ft. below the 50 since our last; the lode is much improved,, and is now worth 30*l.* per fm. for copper ore. The lode in the 50 east is unproductive. The lode in the 50 west contains some good stones of yellow copper ore, tribute ground. The lode in the 20 east is 2 feet wide, composed chiefly of quartz and peach, and of a promising appearance. The stopes in back of 40 west are worth 30*l.* per fm. for copper ore.

SEGLENLAS.—F. Reddicliffe, Feb. 14: Since the last bad weather, after forking out the water, we have had a little more than a week to work, and the wheel is again idle with the frost and snow. We are having a very severe winter. We had just commenced cutting a little ground for the cistern, at the shaft, when the water fell off, in spite of every effort to keep it home. The rise in back of the 12 has been holed, which thoroughly ventilates the workings, and the driving of the 12 resumed; about 6 ft. driven, which shows spots of ore—saving work. The deep adit end was stopped last week, and put the men to sink in bottom of same level, a little south of the rise. A stone or two of ore have been broken here, but not to value. The rise above is again without ore.

SILVER VEIN.—E. Burn, Feb. 15: The lode in the 60 north has improved a little; we have a branch made on the west side 15 inches wide, producing good stones of ore. Our progress in this end is very slow owing to the increase of water. In the 60 crosscut the ground is stiff, the western branch not intersected as yet. The lode in the 50 north is 4 ft. wide, producing saving work, ground favourable for progress. The stope in the 50 is producing saving work, not enough to value. The lode in the 40 north is improved, worth ⅛ ton of ore per fathom in the present end, a very kindly lode indeed. The lode in the stope, north of winze, is worth 1 ton of ore per fathom. The 40 south, on the western lode, is without change the past week. The new pitch set over the winze at the 40 is looking remarkably well, worth full 2 tons per fathom. At the whim-shaft we have completed the plat, and are now engaged cutting down the shaft from the back of the 40; when completed we shall put in penthouse, and commence to sink below the 40 with all possible speed. Our dressing the ore is going on as well as can be expected, considering the severe weather we have.

SNAEFELL.—M. Kitto, Feb. 6: We have so far repaired the road as to enable us to put a carriage up to the mines, still there yet remains a large amount of work to make the road what it should be, of course we continue to work on it. We have cleared the river along side of the engine-shaft for some distance, paved and arched the same, to make it perfectly safe from floods damaging the shaft, at the same time making room for the reception of the machinery. The cutting for smithy, &c., is nearly completed, and we now commence building the same; in this we have raised large quantities of stones, part of which have been used in the river, and a great deal remains for other building purposes. Our main force of men are now employed cutting out ground for wheel-case; here I have as many hands as I can possibly bring to bear on the work, so as to prepare for the 80-ft. diameter water-wheel, which, according to contract, is to be ready for delivery on March 18; although it is more than probable that we shall not be ready with this wheel-case by that time, I assure you that not a moment shall be lost in preparing for the same at the earliest possible day. The present state of the weather is much against surface operations, even to-day we have a great deal of snow on the mines. You are aware that I have no underground works to report on. I was much pleased last week to find some small stones of lead ore in the cutting of the smithy, which is near the line of the lodes, showing, as it does, the strata to be highly mineralised, and taking into consideration the position of the mines, I certainly think the chances of ultimate success can only be regarded as being very favourable.

SORTRIDGE CONSOLS.—R. Jackson, Feb. 16: In Mayne's cross-cut south at the 50 the ground continues easy for driving, and good progress has been made. In the 50, east of Mayne's cross-cut, on No. 1 south lode, the lode is 1½ ft. wide, yielding good stones of ore. In Gilbert's stopes, in bottom of the 40, east of John's cross-cut, on No. 1 south lode, the lode is 1¼ ft. wide, worth 1 ton of good ore per fm. In the 20, east of the engine-shaft, on the south part of the main lode, the lode is 2 ft. wide, yielding some good saving work, and looking very promising for further improvement. In the deep adit level driving east the ground continues easy for driving and congenial for mineral.

SOUTH CONDURROW.—J. Vivian, Feb. 11: At the engine-shaft, below the 20 fm. level, the ground continues favourable for sinking, and we are making good progress In the 20, north from engine lode, west of engine-shaft, the ground is very easy for getting through, and we expect shortly to intersect a lode. In the 20, south from engine lode, east from engine-shaft, we have within the past week intersected four branches within 9 ft., being parts of the middle lode. These branches vary from 3 in. to 1 ft. in width, and are composed of soft quartz, impregnated throughout with rich crystallised red oxide and grey and black copper ores, and are underlying to form one lode within about 10 fms. below the 20. The last of these branches intersected was met with this morning, and is 1 ft. wide, containing more ore than either of the others. We are sinking a winze below the 10, on the middle lode; price, 20s. per fm., our object being to open a communication as quickly as possible with the 20, for the purpose of ventilation, and affording facilities for exploring this lode in the 20. In driving the 20 south the ground beyond the branches referred to is very favourable for driving, and this is also the case in the same level driving north from West Basset lode, so that we hope speedily to effect a communicallon between these points, which will greatly facilitate our further operations in the development of the mine generally. In the deep adit level, west of the new shaft, on West Basset lode, the lode is not so large, or presenting such a kindly appearance as it did when last reported on, a harder bar of killas having been met with we hope that this will be only a temporary change. There is no alteration in any other part of the mine worthy of being noticed.

SOUTH CRENVER.—E. Chegwin, Feb. 14: In the adit end driving west of crosscut, on north lode, the lode is 8 inches wide, producing spar, mundic, with spots of copper ore, and the ground a little more favourable for driving.

SOUTH DARREN.—J. Boundy, Feb. 13: Since my last report we have taken down the lode in the 60 fm. level west, and I am glad to inform you that a decided improvement has taken place—the lode at present is 2½ ft. wide, and, as far as taken down, it is worth for lead and copper 20*l.* per fm., and is promising a speedy improvement. We shall put more men in this end immediately, and push it on as fast as the nature of the ground will admit. The air at this point is bad, and I wish to remark, for your consideration, that it would be advisable, as soon as convenient, to sink the air-shaft to the 60: by so doing it would not only ventilate this level, but would afford greater facility for discharging the stuff. The lode in the 60 west is still very wide, worth for mineral 20*l.* per fm., and looks very promising for improvement. No lode has been taken down in the 40 west since last report, consequently there is no change to notice. We have taken down the lode in the 20 west, which is 2½ ft. wide, and about the same in value as when last reported, worth for lead and copper 10*l.* per fm. The stopes in back of the 40 west are looking very well. There is no change in any other part of the mine to speak of. Our prospects throughout the mine never looked better than they do at present. We have been able to do scarcely anything to our dressing for the past month, in consequence of the frost and snow.

SOUTH DOLCOATH.—W. Roberts, Feb. 15: In the 70 east the lode is 1 foot wide, producing stones of good ore; this end is now suspended, and the men are put to drive west of the cross-cut, to get under the shaft sinking from the level above; the lode in the western end is 1 foot wide, yielding good stones of ore. In the flat-rod shaft, sinking below the 36, the lode is 1 foot wide, producing stones of ore. In other parts no alteration to notice.

SOUTH EXMOUTH.—J. P. Nicholls, G. Maunder, Feb. 15: The 90 fm. level plat is all but finished, and the cross-cut will be immediately started to intersect the lode. The lode in the 75 north consists of barytes and quartz, carrying a small string of lead, and looks promising for an early improvement. The lode in the 60 north is still large, and presents the same promising appearance as when last reported on. The lode in the 45 north is 2½ feet wide, consisting of quartz, barytes, and white iron, interspersed with spots of lead and blende. The cross-cuts being driven east and west from this level have not intersected anything worthy of notice; but we are daily inspecting to meet with some portion of the lode in the western one, the ground being of a favourable description.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Feb. 11: We have cleared the choke in the shaft, and we calculate with good speed to clear up and secure the shaft next week, when we shall erect a horse-whim, and drive the adit west with all speed.

SOUTH WHEAL TOLGUS.—Feb. 15: The lode at Michell's engine-shaft, sinking below the 150, is 20 in. wide, composed of peach, spar, and mundic—a strong lode. In the 150 west the lode is 15 in. wide, consisting of spar and mundic. In the 140 west the lode is split into three branches, with killas in the middle, about 4 ft. wide; there are stones of ore in the north branch. The lode in the 130 west is 2 ft. wide, consisting of spar, and producing stones of ore—a very promising lode. We have two stopes in the back of the 130 west, and two in the bottom. The east stope is producing 3 tons of ore per fm. In the winze sinking in bottom of the 130 west the lode is 18 in. wide, producing 3 tons of ore per fm. In the 120 west the lode is 18 in. wide, looking better now, producing 1 ton of ore per fathom, and promising for improvement. The lode in the west is 20 in. wide, composed of spar and mundic. The ground in the 100 cross-cut north is hard.—South Lode: In the 140 east the lode is 18 inches wide, producing stones of ore. The lode in the 130 east is 16 in. wide, unproductive. In the 120 east, on the south part of the south lode, the lode is 1 ft. wide, producing good stones of ore. The lode in the 100 west is 15 in. wide, consisting of spar and stones of ore—a kindly lode.

ST. DAY UNITED.—J. Cock, J. Gilbert, C. Oates, Wm. Boundy, Feb. 11: Opple's engine-shaft is 9 fms. 2 ft. below the 184; the part of the lode now sinking is split into small braches, but we are still of opinion that the main part is standing south of this; we shall prove this by cross-cutting when the shaft is down to the 194, the part working on is worth 20*l.* per fm. In the 174, east of shaft, the lode is 4 feet wide, worth 10*l.* per fm., not looking quite so well as when last reported. In the 144, east of shaft, the lode is 1½ ft. wide, and worth 8*l.* per fm. At Billing's shaft we have communicated the rise in back of the 184, west of shaft, with the winze below the 174, and the men are now employed taking down the north part of the lode, which is worth 15*l.* per fm. At Trussall's shaft the winze sinking below the 134, east of shaft, is worth 10*l.* per fm. The 124 west, on the tin lode, is worth 8*l.* per fm. The 124, west of same shaft, on Trevivian's copper lode, is 1 ft. wide, producing good stones of ore, and the ground soft for driving. The 134 cross-cut, west of shaft, has cut down the water from the winze below the 124, and we hope to effect the communication with the 134 this month. At At Trevivian's shaft in the 104, west of shaft, the lode is 3 ft. wide, and worth 12*l.* per fm. The winze sinking below the 104 is worth 15*l.* per fm. We have holed the winze below the 97, east of shaft, to the 104, we shall put the men to stope east and west of this shaft. There is nothing new in the 97 cross-cut, north of Harris's shaft. Richards's shaft in the 133 west, on the copper lode, is 4 ft. wide, producing about 1 ton of ore per fathom, with a very kindly appearance. The 152, west of shaft, on the tin lode, is producing a little tin, but not to value. The 140, west of shaft, on the copper lode, will produce 2 tons per fathom. In the winze sinking below the 140, west of shaft, the lode is 3½ feet wide, producing 1½ ton per fathom. At East Wheal Maid, in the 20, west of Williams's shaft, the lode is 2 feet wide, producing 1 ton of good ore per fm. The 10, west of shaft, is at present disordered by a cross branch. In the winze sinking below the adit level the lode is 2½ feet wide, producing some good stones of copper and tin ores. The water has very much increased during the last fortnight, but we are still keeping it with Bissoe Pool and Opie's engines. One of the boilers at the steam-stamps broke this week, which will retard our stamping operations for a few days.

ST. JUST CONSOLS.—John Carthew, William Williams, Feb. 16: All our work has been going on well. We have a large, kindly tin lode in the Guide shaft, which we are sinking below the deep adit level. When we sink this shaft to the 10 fathom level below adit, we intend to extend east and west on this lode, and expect to raise a good quantity of tinstuff. The men stoping on the new lode are breaking rich stones of tin.

ST. JUST UNITED.—R. Pryor, W. R. Rutter, Feb. 13: There is nothing new to report this week, more than that the north lode in the 74, driving west, is improved, now worth 8*l.* per fm.; we have let some pitches at this level, to the east of the shaft, and shall let others to the west, when practically convenient; this is the deepest level in the mine, and the lode shows no falling off whatever, but rather improves in depth.

TOLCARNE.—Feb. 15: Field's Lode: Field's shaftmen are cutting tip-plat and barrow-road in the 60 fm. level, preparatory to sinking the shaft below the 60 fm. level. In the 60 fm. level west the lode is 20 inches wide, composed of spar and gossan. The lode in the 50 fm. level east it 2 ft. wide, composed of gossan, spar, and stones of ore—a very promising lode. In the 40 fm. level east the lode is 2 feet wide, consisting of gossan, soft spar, with occasional stones of ore—a kindly lode. The lode in the 20 fm. level east is 16 inches wide, producing 1 ton of ore per fathom. In the 10 fm. level east the lode is 20 inches wide, opening tribute ground. The lode in the adit level is 15 inches wide, producing saving work, and promising in appearance.—New North lode: In the 40 fm. level, west of cross-cut, the lode is 20 inches wide, consisting of fluor-spar, with good stones of ore. The lode in the 40 fm. level, east of the cross-cut, is 10 inches wide, producing 1 ton of ore per fathom. The lode in the 30 fm. level, east of the cross-cut, is 10 inches wide, producing ¼ ton of ore per fathom, and is looking promising for improvement. In the winze, sinking below the 30 fm. level, the lode is 10 inches wide, producing saving work. We have not met with the lode in the 50 fm. level cross-cut north, but expect to do so shortly. The ground in the adit level cross-cut south is easier, and the end very wet.

TRELOWETH.—T. Richards, Feb. 16: The lode in the 154 is yielding good stones of yellow copper ore. The lode in the sump winze, sinking below the 144, has improved in value, now worth 10*l.* per fm. The lode in the 144, east of sump-winze, is worth 7*l.* per fm. The lode in the 134, east of sump-winze, is worth 10*l.* per fm., and the ground easier for driving. The lode in the winze sinking below the 124, east of sump-winze, is worth 6*l.* per fm. No alteration in any other bargain to notice.

TRENCROM.—W. Arthur, H. Woolcock, Feb. 16: There is no change to notice in the 110, east of Hollow's shaft, since our last report. The lode in the 100, east of Hollow's shaft, is 16 inches wide, worth 5*l.* per fathom. The lode in the 90, west of Giesler's engine-shaft, is 2 feet wide, worth 5*l.* per fathom. The lode in the 90, east of Hollow's shaft, is 16 inches wide, worth 7*l.* per fathom. The lode in the 70, east of Hollow's shaft, is 12 inches wide, with an improved appearance, and producing saving work for tin. The lode in the rise above the 50, east of Hollow's shaft, is 14 inches wide, worth 4*l.* per fathom. The lode in the 40, east of Hollow's shaft, is 12 inches wide, producing saving work for tin.

TRELYON CONSOLS.—R. James, E. Pooley, Feb. 16: The lode at the several points of sinking, driving, and stoping throughout is the same in value as last week.

TREVENEN AND TREMENHEERE.—J. Medlin, Feb. 15: The 162, east of new sump, is worth 7*l.* per fm.; the stope in back of this level is also worth 7*l.* per fathom. The lode at Trevenen shaft, sinking below the 162, is 2 ft. wide; the south part carries a small but rich branch of tin, worth 8*l.* per fm.; it is in a very congenial stratum of ground, and, on the whole, shows symptoms of an early improvement. The 162, west of this shaft, is worth 5*l.* per fm. The level going east is without change since last report. This remark will apply to the tribute department.

TYNE HEAD.—George Millican, Feb. 11: We have rather more sulphur in the vein (back bone), and the men get on a little better; they have 4 ft. laid in of the first fathom of their contract.

VALE OF TOWY.—A. Waters, T. Harvey, Feb. 15: Field's shaft to sink 8 fms. 2 ft. below the 110; the lode in the present bottom is 5 feet wide, yielding fair quantities of blende throughout; the ground just as last reported The ground in bottom of the 110, north of shaft, is let to Harding and Co. (four men), to sink and stope, at 30s. per ton for blende. The 126, south of Clay's, is without change to notice since our last report—a great lode, yielding good blende stuff throughout; in the stope behind this end we have discovered a strong lode, charged with blende, standing to the west of the course the level has been driven upon; we cut into this on Friday last, and hope to report fully on it next week. The tribute department is yielding fair quantities of ore throughout. In consequence of deep snow and frost nothing can be done on the dressing-floors.

VIGRA AND CLOGAU (Gold).—Arthur Dean, Feb. 11: The sudden demand for men for the new railway works in the vicinity of Barmouth has caused the withdrawal of a good many of the miners and surfacemen previously employed at the Vigra and Clogau Mines, very much to the inconvenience of the company, but I trust the derangement is only temporary. I went through the underground workings yesterday, and upon the whole, the aspect of the working places has improved during the week. With the opening of many new places in the lodes, we may reasonably expect an early renewal of discoveries of richer mineral. In the height of 19 fms. between the 5 and the shallow adit, at St. David's, only the rich ground discovered has hitherto been wrought, representing but a very small proportion of the ground laid open. In the remaining portions unwrought, there are very good reasons for the belief that other rich bunches are hidden therein, but not having been intersected by the sinks and drivings their discovery has yet to be effected. On the St. David's lode there

provided, and the rope-drums contracted for, and part of the wire-ropes manufactured. At the reduction works, the water-wheel, with the present supply of water, has full command of the 32 heads of stamps attached to it. The erection of the steam-engine is in a forward state, and the masonry is ready for the last 16 heads. Two additional Britten machines are required, and three more amalgamating machines now upon the premises will be erected. The machinery for concentrating and reducing the sulphurets is in hand. The stamps will only extract the free gold, and the full produce cannot be obtained until the other machinery is ready. I need hardly say that the severe weather has much impeded progress.

WALKHAM AND POLDICE.—J. Lean, Feb. 11: This being our usual monthly setting day, we set as follows:—The engine-shaft to sink below the 38, to six men, at 11*l.* per fm.; the shaft is down 3 fms. 5 feet below the tip-plat. The 38, north of shaft, to six men, at 4*l.* 10s. per fathom; lode 4½ feet wide, producing good stones of lead and blende. The 26, north of shaft, to two men and two boys, at 3*l.* 10s. per fm.; the part of the lode being carried is 4 feet wide by 2 feet from the floor of the level, producing fair work for lead—it is a pretty-looking lode. In the 26, north of shaft, on the east side of the lode, driving in the country south of the cross-cut, in search of the wheel-pit lode, to two men and two boys, at 2*l.* 10s. per fm.; here we have intersected a small branch bearing east and west, containing strong mundic. A winze to sink in the bottom of the 26, north of shaft, to four men, at 6*l.* 15s. per fm.

WELSH (Gold).—A. Dean, Feb. 11: Since the commencement of the month a very sensible improvement in the yield of gold has been manifested in the minerals broken from nearly all the working places at present wrought. By pushing through the poor bars of ground which masked the richer ground beyond, richer mineral has been reached. By multiplying the number of working places, we shall be able to find compensation by improvements in some of them for deterioration in others. Since the frost broke up, the double railway incline, 400 yards long, which will connect the upper and lower mines with each other and with the stamps, has been pushed on, and is now in a forward state; with the completion of that work, several working places higher up the mountain will be brought into operation, where good minerals, and in considerable abundance, have been proved to exist. With the additional supplies those places will afford, and with the means of transport hitherto wanting at command, we shall be enabled to keep the 24 heads of stamps completed in full activity. With the abatement of the rigorous weather, which has so long impeded our surface operations, and with a balance established between the mines and the reduction department, I doubt not the improved results will be satisfactory to the directors, and confirm the calculations of average yield of gold previously submitted. The improvement in the No. 1 level, Berthlwyd, has continued, and the level is entering a zone of ground from which we have great expectations. In the No. 2 level, Berthlwyd, 7 fms. higher up, the commencement of which, from the face of the hill, is just over the present end of the No. 1 level beneath, a sloping sink, 4 fms. long, has been commenced in the bottom, to divide the ground down to the No. 1 level, in anticipation of the arrival of that level at the sink. The lode in the sink is 5 ft. wide, and although visible gold has not been detected in the mineral broken from it, yet the stamps show a good produce. In the stope west of the sink, which is the furthest point of working, some good pieces of visible gold have been broken during the week, and the mass of mineral breaking there appears to be of good character. It has been necessary temporarily to take up some of the rails in the level, whilst the work at the sink has been going on, and the mineral broken from the west stope has, therefore, not been taken to the stamps. I this afternoon broke some visible gold from the back of the lode, about 15 fathoms further west than the extreme point of the west stope, and the part of the lode between those points has a very encouraging look. To the points just described the workings are chiefly, and the supplies of minerals for the stamps entirely, confined, until the completion of the railway shall enable us to attack the promising places higher up in the mountain. At Cefn Coch shaft the work of laying open the cross-course, and the east and west lodes, three in number, intersected by it, is progressing satisfactorily. From the surface to the adit level beneath, the cross-course has been sunk through 17 fms., with excellent mineral all the way. From the vicinity of the sink a large quantity of good mineral has been broken, and is lying at the adit mouth until it can be made available by the completion of the inclined plain to that locality; a rise in the middle lode shows a leader of visible gold, and the ground is worth 60*l.* per fm. for gold in the rise. The drivage south from shaft, in the cross-course, has nearly reached the part of the south lode on its eastern side, and we hope to meet with good stuff there. The south, middle, and north lodes have all been heaved 30 ft. north on the western side of the cross-course; the drivage west, on the western part of the south lode, has passed through disordered ground, and the lode is becoming wider, and will soon, at 12 fms. from surface, come under a part of the lode which looks well at the surface. The mineral from the end of the drivage has not been tested during the last fortnight; I cannot, therefore, say whether it is of paying quality or otherwise. Upon the north lode a level is being driven, which for 3 fms. in length is in poor mineral, but the lode in the end is looking better, and is letting out a good deal of water, from which we infer that a cross-joint will soon be met with, and the gold produce increased. As the lodes proceed westward from the cross-course their backs rise rapidly, and at surface are very large. Various experimental trials have shown good results, and to reach the most desirable places the railway from the top of the inclined plane will be pushed forward with all speed. The materials for its construction are collected, and the completion of the inclined plane will liberate the necessary labour force for its execution. As the workings west of Cefn Coch shaft are from 800 to 1000 ft. above the level of the valley, the severity of the weather has been much more felt there than in the lower ground, and six weeks of continuous frost there has prevented any attempt at carrying on the surface work for the railway to convey the mineral to the stamps. In the production department, 24 heads of stamps are completed, 10 amalgamating machines, and 6 Brittens. The work for the machinery to concentrate and deal with the sulphurets is in progress: the stone-breaker has been lifted 6 ft. higher, the railway from the mines to supply the mineral to it has likewise been raised 6 ft., and the railway viaduct from the stone-breaker to the stamps passes is in operation. A condenser has been attached to the steam-engine, and realises the expected economy of fuel. The auxiliary 30-ft. water-wheel is ready for erection; the masonry for the wheel-pit is also ready. As the ores of a richer class are increasing, I recommend an immediate augmentation of the Britten power, by two additional machines for their reduction. Before the full quantity of available gold can be extracted from the minerals, the machinery for the reduction of the sulphurets and arseniuets of iron, &c., present in all the minerals, must be completed. A great deal of the gold is mechanically combined with the sulphurets, &c., and is not attainable through the stamps, hence the apparent poverty of some of the mineral lately stamped. The balance of the gold obtainable will be extracted when the necessary reduction machinery is finished. My opinion of the solidity of the enterprise remains unaltered.

— Arthur Dean, Feb. 15: The frost is unabated—indeed, more severe than before. By the use of hot water we were enabled to keep the stamps and Britten's going yesterday, but I fear that if the frost continues as now we shall be shut up, which will be very vexatious. Surface work, except the supplying of the stamps, is almost at a standstill, not a man at work upon the railway. We have four men breaking rich work in the rise at Cefn Coch. At Clogau the reduction department is at a stand, as we have not any warm water there to keep the blankets, &c., free.

WEST BASSET.—W. Roberts, Feb. 15: North Lode: In the 154 east the lode continues 3 ft. wide, producing stones of copper ore and a little tin. In the 144 west the lode is 4 ft. wide, and nothing in it to value. In the 124, east of Percy's, the lode is 2½ ft. wide, producing occasional stones of ore; the same will apply to the lode in the 124, west of ditto.—Caunter Lode: In the 65 east the lode is 1 ft. wide, producing 1 ton of ore per fathom; the lode in the same level west is 1½ ft. wide, producing good stones of ore.—Middle Lode: In the 52 east the lode is 1 ft. wide, with occasional stones of ore. In the winze sinking under the 52 the lode is 2 ft. wide, producing stones of ore and good work for tin.

WEST CARADON.—William Johns, Feb. 15: We have nothing very new in the mine since we sent you our last setting reports, with the exception that we have reached in the 90 cross-cut, south of the main or Allen's lode, what is called the spar lode; we are now cutting into the same. But we would here remark that this lode we do not attach much importance to, as nothing has been found on it throughout the mine. The main object we are aiming at is still before us—Clymo's and Jope's lode; we calculate to have about 10 fms. further to drive to reach the first-named lode. In the 92 west, on Vivian's south lode, the end is again improving, worth about 2½ tons per fathom. All other operations we are pushing on as fast as possible.

WEST CLIFFORD UNITED.—G. Johns, Feb. 15: We beg to say that since our report of the 8th inst. we have set another pitch to work by four men. There is no alteration in appearance in the value of the lode in the other pitches since last report. The severe weather this week has greatly impeded our progress in the surface operations, in consequence of which we have not been able to get the steam capstan to work, which prevents the shaftmen from making good speed in fixing the pitwork; we are, however, pushing on every department of work with all possible vigour.

WEST GREAT WORK.—S. J. Reed, Feb. 14: We have completed the cutting of the plat in the 26 fathom level, and we are now engaged driving west to intersect the flookan, on which a cross-course will be driven south to cut the No. 2 lode. In the 16 the No. 2 lode west is about 2 ft. wide, worth 8*l.* per fm. This lode, east from cross-cut, continues to improve, and is about 2 ft. wide, worth 10*l.* per fm. The cross-cuts north and south in this level are being vigorously pushed forward for the intersection of the side lodes; the ground is more favourable for driving. In the 8, driving east from cross-cut, the No. 2 lode has improved, now producing rich stones of tin, worth 6*l.* per fm. On this lode, driving west, we are opening tribute ground, worth 5*l.* per fm. The No. 3 lode, driving east from cross-cut, maintains its formerly reported value, carrying a good leader of tin, worth 11*l.* per fm. The mine continues to open out well, with fair chances of greater improvements at an early day.

WEST MARIA AND FORTESCUE CONSOLS.—William Skewis, Feb. 13: The ground in the 80 cross-cut north is without change, and fair progress is being made in the driving. The 40 west, on the caunter lode, is about 4 ft. wide, hard and spare to driving in; we, therefore, thought it advisable to drive the end by the side of the lode for the purpose of intersecting the Capel Tor lode, west of the caunter lode, at the earliest possible date, as we contemplate an improvement in both lode and strata at that point. In the 40 east, towards Fortescue shaft, good progress is being made in stoping down the bottom, and we hope by the end of the month to be able to get into the cross-cut north from this shaft. The 20 east, on Capel Tor lode, is letting out more water, indicating that the lode is becoming of a more open and easier nature. The orey part of this lode has not been taken down since last report. In the 20 fm. level west, on Capel Tor lode, in the western end, the ground has rather improved for driving, and there are strong indications of an early productive lode. The lode in the 12, east of new shaft, is about 2 ft. wide, composed of mundic, quartz, prian, and copper ore; altogether a fine looking lode. The adit winze, in bottom of the adit, is not yet holed to this level. The 40 cross-cut south has since last report been commenced to be driven, and the water is now issuing very strongly from the end, from which it would appear that some lode or branch is not far distant.

WEST NANTY.—Feb. 13: The lode in the adit level, going east of shaft, is large, and the part we are driving on is yielding a little ore, but not to value. The stope over this level, east of shaft, will yield about 1 ton of lead ore per fathom; the western stope is yielding good saving work. The shaft is down 10¼ fms., and as soon as we get down another 3 feet, to make 11 fms., so as to have 10 fms. of backs, we shall commence to cut through the lode, and east and west of shaft. We have cleared up the old sink to the east of the present workings, and have put six men to sink a winze down upon the adit level, where there is about 10 fathoms to sink, the adit level now being forth to within about 3 fms. of being under this point.

WEST WHEAL TOLGUS.—Feb. 15: The lode, or part of lode, we are carrying at Taylor's engine-shaft, sinking below the 75, is producing 5 tons of ore per fathom for length of shaft, 14 ft. In the 75 east the lode is not looking quite so well for ore as when last reported, now producing 1¼ ton of ore per fm. In the rise over the back of this level the men are desuing the lode. In the 75 west the part of the lode we are carrying is yielding 5 tons of ore per fm. In the 65 west the lode is 5 ft. wide, producing 4 tons of ore per fm. The stope over the back of the 65 west is producing 2 tons of ore per fm. The two stopes over the back of the 65 east, one of them yielding 2 tons and one 3 tons per fm.—North Lode: In the 65, east of Taylor's engine-shaft, and east of the cross-cut, the lode is 15 inches wide, consisting of spar and stones of ore—looking promising. The stope in back of the 65, east of rise, is yielding 2 tons of ore per fathom, and the stope in back of the 65, west of rise, is yielding 3 tons of ore per fm.

WEST WHEAL VOR.—J. Southey, Feb. 15: The sinking of Gundry's engine-shaft below the adit level is progressing favourably, the ground being still good, and the strata congenial for mineral. Nothing worthy of notice in the adit cross-cut.

WHEAL AGAR.—W. Roberts, Feb. 15: In the 100, east of Windstow shaft, the lode is 1 ft. wide, composed of spar and stones of ore. In the 90 east the lode is 2 ft. wide, producing good stones of ore. The lode in the 90 west is small. In the 60 east the lode is 1 ft. wide, producing stones of good ore.—Dobree's Lode: In the 90 west the lode is small. In the 90, east of western shaft, the lode is 2½ ft. wide, chiefly spar and flookan. In the 80 east the lode is disordered by the influence of a cross-course. In the old whim-shaft, sinking below the 110, the lode is 1 ft. wide, of spar and flookan; the ground continues favourable for sinking.

WHEAL BASSET AND GRYLLS.—J. B. Wilkin, W. Harris, Wm. Oats, jun., Feb. 11: During the past month the 40, driving east of Wheal Fat shaft, has been communicated on the junction of the caunter with Brenton's lode, opening tribute ground, and the same level is now set to drive west on Brenton's lode by four men, at 6*l.* per fm. The 30, east of Wheal Fat shaft, has been driven 4 fms. 5 ft., opening tribute ground; set to drive by two men and two boys, at 7*l.* per fm. The 30 west has been driven 1 fm. 5 ft. 6 in.; the lode is worth 12*l.* per fm.; set to drive by six men, at 6*l.* per fm., and 8s. tribute. A winze sinking below the 22, over this end, has been sunk 4 fms. 5 ft.; the lode in the winze worth 12*l.* per fm.: set to sink by four men, at 5*l.* per fm., and 8s. tribute. As the tin seems to be dipping east towards Middlework shaft we have set this shaft to sink below the 22 by six men, at 10*l.* per fm. During the past month we have had a run or crush of ground, east of Wheal Fat shaft, which has caused some delay in the operations in that point of the mine, but it is now full from the 30 to the surface, and the shaft has been made secure with timber. Tyacke's engine-shaft, sinking below the 54, has been sunk 4 ft. 6 in.; set to sink by six men, at 22*l.* per fm. The 54, east of Tyacke's, has been driven 6 fms. 1 ft. 6 in.: the lode is worth 8*l.* per fm.; set to drive by six men, at 2*l.* The 54, west of Tyacke's, has been driven 5 ft. 3 in.; the lode is poor; set to drive by four men, at 5*l.* 10s. A rise has been put up in the back of this level 2 fms. 1 ft., and communicated to the winze from above, enabling us to set a pitch at 6s. tribute. The 44, west of Tyacke's, has been driven 2 fms. 3 ft.; the lode is worth 12*l.* per fm.; set to drive by four men, at 3*l.* per fm. The 44, east of Tyacke's, has been driven 1 fm. 1 ft. 3 in., opening tribute ground; set to drive by two men, at 5*l.* 10s. per fm. The 34, west of Tyacke's, has been driven 3 fms. 5 ft. 3 in., opening good tribute ground, and we expect to find the junction with Harvey's lode in about 6 ft. more driving. Grigg's shaft has been sunk 2 fms. 4 ft. 4 in., and communicated to the 40. The cross-cut south at the 34 has been driven 9 fms. 3 ft. 6 in.; set to drive by six men, at 2*l.* per fm. The 40, west of Wilkin's, has been driven 1 fm. 5 ft. 6 in.; the lode is poor; set to drive by four men, at 5*l.* per fm. The 60, west of Gundry's, has been driven 4 fms. 0 ft. 9 in., opening ground; set at one-half tribute. The 60, east of Gundry's, has been driven 5 fms. 1 ft. 3 in.; the lode is poor; set to drive by six men, at 3*l.* per fm. The 50, west of the junction, east of Gundry's, has been driven 2 fms. 1 ft.; the lode is large and promising, but poor; set to drive by two men, at 4*l.* per fm. The 20, west of Wilkin's, has been driven 1 fm. 5 ft. 6 in.; the lode is poor; set to drive by two men, at 3*l.* 10s. per fm.; the same level east has been driven 2 ft.; the lode is worth 5*l.* per fm.; set to drive by two men, at 2*l.* 5s. per fm., and 5s. tribute. A winze has been sunk in the bottom of this level 1 fm., and is now set to stope at 8s. tribute.—Wheal Foster: Drigger's shaft has been sunk below the 30 fm. level 4 ft., enabling us to drive the levels east and west, but we have not yet been able to go south to the other lodes. The 35 east, on Cope's lode, has been cleared 6 fms.; the lode in the back poor where not taken away. The same level west has been cleared 8 fms.; the lode taken away; set to clear by six men, at 7*l.* per fm. The eastern shaft has been communicated to the 25, and we have set on tribute a pitch in the back. We are now clearing cross-cut north to Street's lode by four men, at 1*l.* per fm. The plat at Dumpling's shaft has been completed to the 25, and the level set to clear by four men, at 1*l.* per fm. The number of tributers employed is 110, at tributes varying from 5s. to 13s. 4d. in 1*l.*, and we expect to raise about 6 tons of tin per week.

WHEAL CARADON.—F. Pryor, J. Brown, Feb. 11: We have sunk the winze below the 60, east of Cruttwell's engine-shaft, and also put up a rise in the back of the 70 during the past month a little over 4½ fms. In the former we have been breaking very good stones of copper ore; in the latter no lode has been taken down, neither is it our intention to do so until a communication is effected, to accomplish which we calculate to have 3½ fms. to rise and sink, and we hope this will be carried out on or about next setting-day. In the 60 fm. level cross-cut, south of Cruttwell's engine-shaft, we have not met with anything of importance since our last report to notice, but judging from the increase of water coming from the end we think that a branch or lode is not far ahead of us, and the appearance of the ground is such as can be desired for mineral. Morrell's flat-rod shaft is down 9 fms. below the 30, and every effort will be used to get it down to make a 40 fm. level against our next setting-day, after which the shaft will be cased and divided to bring down the kibbles for drawing the stuff therefrom, and a short cross-cut will have to be driven at this point to intersect Mary's lode, where we are anxiously looking forward for the result. We are pleased to say that the machinery throughout is in first-class order, and performing its duty in a most efficient manner.

WHEAL EDWARD.—G. Rowe, Feb. 11: The lode in the 61 west is gradually improving, being nearly 3 ft. wide, very strongly charged with mundic, accompanied with good quality yellow copper ore to the amount of 1½ ton per fm., showing indications of being near an important discovery. The stoping in bottom of the 61 east is progressing very satisfactorily, having accomplished nearly 10 fms. during the past month.

WHEAL EMMA.—T. Bennett, Feb. 16: The engine-shaft is down 5 fms. 2 ft. below the 80; in sinking we find the flookan is approaching nearer the lode than it has been for some few fathoms above the 80; it has also become mineralised, with strings of mundic and copper ore. I consider such indications speak favourably for a productive lode at the next level. The lode in the 80 east is large, yielding 1½ ton of ore per fm. No. 1 stope, in back of the 46, will yield 2 tons of ore per fm. No. 2 will yield 1 ton per fm. We have holed the rise in back of the 34, and have set tribute pitches east and west of the same; the lode will yield 1½ ton per fm. The lode in the 20 is large, producing occasional stones of ore. The lode in the 10 east is 2 ft. wide, composed of peach, prian, quartz, and ore, yielding of the latter ⅙ ton per fm. The tribute pitches, on the whole, are a little improved, but the very severe weather greatly impedes progress in our dressing operations, consequently we shall not have so much ore as we should otherwise have had had the weather been favourable. We hope to sample on Thursday next, Feb. 23, 190 tons of ore.

WHEAL ESTHER UNITED—*(Special Report)*.—N. Ennor: I have inspected this tin mine, which is situated in the parish of Cardinham, near Bodmin, and adjoins the Old Trevedoe Tin Mine. The sett is very extensive, and contains seven known tin lodes, all of which produce tin more or less. These lodes generally are large, and many of them have been worked on by the ancients, some for nearly a mile in length, although only in the old fashion, as deep as they were able to go for water, smelting their tin near the spot, as can be seen by the remains and ruins of what are called "Jew's houses." There are also two or three known cross lodes in the sett, but the most encouraging feature is that two of these lodes are caunters, and three or four are near each other, and about ten intersections in the sett. At many of them two or three lodes will run together for some distance. These are the best intersections known, as in almost every case two lodes running together produce ore, when either if alone produces very little. I could point out hundreds of places where lodes become productive when they run on together, and this mine is particularly favoured in this respect. The lodes are large, with a good north underlie. I first noticed a north-east caunter, where the adit is driven on a lode from 3 to 6 ft. wide, composed of blue capel, peach, schori, and iron, with tin in places, good stamping work; this adit is driven on Pascoe's lode to within about 30 fms. of an east and west lode (No. 5), and a cross lode; at this point we may fairly reckon on its forming a good deposit of tin. I may mention that the stratum about these lodes is soft tin granite. The adit can be driven for 2*l.* 10s. per fm., leaving 20 fms. backs; this point I recommended to be prosecuted at once. Near the extreme west end of the sett four lodes meet, or rather run into each other, within the space of 100 fathoms. Nos. 2 and 4 are opened upon, and cleared down to the depth of the old men's workings only 4 or 5 fms. deep, and under these old workings these lodes are seen running together for 10 fms. in the opening; here they are raising good work for tin. The two lodes with the capels are 6 ft. wide, and underlying only from 1 to 2 ft. in a fathom. The north lode is soft, and carries the tin. Here I remark a singular feature in the stratification—first, the north side is a pretty tin granite; and, second, the south or footwall is killas, underlying the granite. I cannot help noticing this point as a likely place to produce tin, but nothing can be done without sinking a new shaft. I recommend machinery to be put up, and a shaft sunk on the line of the lode 20 fathoms, then open out levels, when the back will be taken away for about 1*l.* per fm., and if tinny, as now, it must become a profitable mine. Two lodes (Nos. 5 and 6) can be cut from the shaft I should say by driving north 20 fms. I should also recommend 20*l.* to be laid out in opening pits on the lodes at the junction, as it is not unlikely they will produce tin almost at surface. I expect this will be a wet mine, as it is where the two strata meet. There is a good water-wheel on the mine.

WHEAL EXMOUTH.—J. Hampton, N. Faull, Feb. 15: The deep adit is being driven south on the most westerly lode hitherto discovered, and in places laying open good tribute ground. The shallow level is extended nearly as far as the new rise, and will be shortly communicated. The back and the bottom of this level is very good for some fathoms in length, and will be worked at 2*l.* 10s. per ton tribute; the tributers are working well, and getting good wages. The tributes vary from 2*l.* 10s. to 6*l.* per ton. We are glad to say the results of this month's settings will more than meet the cost, and by the time the deep adit end is extended about 20 fms. further (about two months' work) more pitches will be set, at moderate tributes. The parcel of lead sold realised 11*l.* 12s. 6d. per ton, but from the improvements in the mine we anticipate better prices for future sales, which will be two-monthly.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Feb. 11: The lode in the 120 west is split in two parts, and the ground is favourable for driving, therefore we think we may look forward for a change. The lode in the 110 east is 2 ft. wide, yielding a little tin. The lode in the 110 west is 4 ft. wide, producing good work for tin, worth 12*l.* to 14*l.* per fm., a kindly lode. Two stopes above this level worth 15*l.* each. The lode in the 100 east is 3 ft. wide, yielding good tinny work, worth from 10*l.* to 12*l.* per fathom. The lode in the stope above this level is worth from 8*l.* to 10*l.* per fm. The lode in the winze sinking below the 100 west is 3½ ft. wide, and yielding good work for tin, worth 15*l.* per fm. The lode in the stope above this level is worth 10*l.* per fm. The lode in the winze sinking below the 90 east is 4 ft. wide, producing tinny work, worth 10*l.* to 12*l.* per fm. The two stopes above this level worth 10*l.* and 8*l.* per fm. The lode in the 90 west is 15 in. wide, and producing a little tin. The lode in the stope above this level is worth 8*l.* per fm. The lode in the rise above the 80 is 2 ft. wide, and yielding tinny work, worth 10*l.* per fm. Two stopes above the 80, west of shaft, are worth 15*l.* and 8*l.* All the other places as before reported.

WHEAL GRYLLS.—Edward Rogers, James Pope, Feb. 16: Fisher's Lode: In the 40, driving east of Annie's engine-shaft, the lode is 2 feet wide, worth 3*l.* per fathom. In this level west there is no alteration; the lode is worth 2*l.* per fathom. In the stopes in the back of this same level the lode is worth 10*l.* per fathom. In the 30, driving east of Grylls whim-shaft, the lode is small and unproductive. Pressure shaft is down 2 fathoms below the 20; the lode is small and poor. In the 10, west of Jones's whim-shaft, the lode is a little improved, worth 3*l.* per fathom.—Standard Lode: The 10, west of the western shaft, is stopped, by reason of an increase of water, and the men put to cross-cut north in the adit level. In the 12, from surface, and driving east of Badger's shaft, the lode is small and poor.—Georgia Lode: In the 30, driving south, the lode is 2 feet wide—unproductive. In the cross-cut, west of Georgia shaft, the ground is favourable for driving.

WHEAL HARRIETT.—S. Williams, Feb. 11: The lode in the 130 east end is 1 ft. wide, worth for tin 4*l.* per fm. The 115 west end, from east cross-cut, is producing stones of ore, but not sufficient to value. The stope above this level is worth for copper ore 6*l.* per fm. The lode in the 115 east end, from west cross-cut, is producing stones of copper ore. The 90 cross-cut is progressing favourably.

WHEAL HEARLE.—J. S. Phillips, Feb. 10: The skip-shaft is nearly completed to the 150, and the west winze will also be of similar depth this month in the tin ground. The 122 is passing through the second western run of tin, and is worth 6*l.* per fathom. The 140 fm. (intermediate) level, in the above winze, and the 150 west (underneath), will be driven by the shaft and winzemen forthwith, to open deeper sections of stopes, which will extend from the 130 to 150 fm. levels, as the 122 west is now opening under the 110. The 122 east is being continued southward at the month's price without alteration for the intersection of the Boscaswell Downs rich lode; whilst the Boscaswell Downs Company are driving northward to cut Wheal Hearle lode, as prospective collateral auxiliaries to both mines. The stopes are being wrought at the month's price, as particularised in last report, and value as stated.

WHEAL HOPE.—D. Reece, Feb. 14: In the 65 west the lode is little improved; the elvan that came out of the south side does not continue. We have, from the dip of the lead gone down in the bottom of the 48, about 8 to 10 fathoms more to drive. In the 65 east a little lead, but not enough to value. In the 48 east the lode is mixed up with spar and mundic, and in a good channel of ground for lead.

WHEAL IDA.—F. C. Harpur, Feb. 14: The sinking of the engine-shaft is progressing very favourably, by a full number of men, through a congenial strata for the production of mineral, being a light blue killas or clay-slate, traversed by small veins of mundic, prian, and quartz, spotted with silver-lead ore. The sinking of this shaft will be pushed on as fast as the nature of the ground will admit of; all the pitwork is quite complete, which, with the engine, is working very well.

WHEAL KITTY (St. Agnes).—W. Polkinghorne, S. Davey, Feb. 11: Nothing new has taken place in the 82, driving west of Holgate's shaft, during the past week.—Pryor's Lode: In the 65, driving east of new shaft, the lode is worth for tin 6*l.* per fm. In the 65, driving west of shaft, the lode is worth for tin 20*l.* per fm. In the 54, driving east of shaft, the lode is worth for tin 9*l.* per fm. In the 54, driving west of shaft, the lode is 3 ft. wide, worth for tin 12*l.* per fm. In the 44, driving east of shaft, the lode is worth f r tin 7*l.* per fm. In the 44, driving west of shaft, the lode is worth for tin 10*l.* per fm. There has been no lode taken down in the 34, driving east of shaft, since our last report. In the adit level, driving west of cross-cut, the lode is worth for tin 3*l.* per fm.

WHEAL KITTY (Uny Lelant).—William Williams, Feb. 16: North Russoe Lode: The lode in the 140 fathom level end, west of cross-cut, is worth 5*l.* per fathom. The lode in the 130 end, west of rise, is worth 4*l.* per fathom. The lode in the 130 end, east of rise, is worth 3*l.* per fathom. The lode in the 120 end, west of rise, is worth 4*l.* per fathom. The lode in the 120 end, east of rise, is worth 3*l.* per fathom.—Gowan Lode: The lode in the 90 end, east of Rogers's shaft, is worth 3*l.* 10s. per fathom. In the 80 end east, at present, the lode is small. In the 70 end west the lode is unproductive. The stope in the back of the 70 is worth 16*l.* per fathom. There is no change to notice in any other part of the mine.

WHEAL MARGERY.—R. James, W. Rogers, Feb. 16: In the 132, and also in the 122, east of American shaft, the lode has a little improved, and worth 6*l.* per fm. in each. Every other point is the same in value as last week.

WHEAL MARY ANN.—P. Clymo, H. Hodge, J. Harris, J. Stevens, Feb. 9: Clymo's engine-shaft is sunk 6¼ fms. under the 200. The cross-cut at this level is extended 7 fathoms towards the lode. In the 190, north of Clymo's shaft, the lode is 2 ft. wide, worth 5*l.* per fm.; in the same level south it is 2½ ft. wide, worth 10*l.* per fm. In the 180 north the lode is 2 ft. wide, worth 6*l.* per fm.; in the same level south it is 2½ ft. wide, worth 9*l.* per fm. In the 170 south the lode is 1½ ft. wide, worth 5*l.* per fm.; in the same level, north of Pollard's shaft, we are still driving by the side of the lode. The stopes and pitches are producing much as usual.

WHEAL MARY HUTCHINGS.—William Edwards, Feb. 16: The deep adit cross-cut, going north, continues most favourable for driving, now set at 2*l.* 10s. per fathom, stent to the end of the month. We have just cut a large stream of water, issuing from the end with great force, which is strongly mineralised.

WHEAL NORRIS.—J. Andrews, Feb. 11: At our setting to-day the following bargains and pitches were set:—Carter's shaft to sink below the 45, by nine men, at 27*l.* per fathom. The 45 cross-cut to drive south of Carter's shaft, by six men, at 7*l.* per fm. The 35 cross-cut to drive north of Carter's shaft, by four men, at 4*l.* 10s. per fm. The 35 to drive east of cross-cut, on new lode, by four men, at 13*l.* per fm.; the lode in this end is full 3 ft. wide, spotted with yellow copper ore—a strong masterly lode. No. 1 pitch in back of the 45, by six men, at 8s. in 1*l.* No. 2 pitch in back of the same level, by six men, at 7s. in 1*l.* We shall commence to clear out the stuff behind the 45 fm. level end on Monday next, and I hope by the middle of the week the end will be in full course of driving.

WHEAL SPARNON.—W. Tregay, Feb. 11: The 70-inch engine, at the new engine-shaft, was set to work to day, and went off in good style. You are aware from last week's report that the water had risen above the 20, and prevented our working in that level. We expect to get this out, and the men working there early in the coming week.

WHEAL TREMAYNE.—J. Williams, R. Williams, Feb. 15: In the new engine-shaft, in the 153 east, the lode is 1 ft. wide, chiefly composed of spar, with spots of copper ore; in the same level west the lode is 14 in. wide, composed of spar, mundic, and prian, with a kindly appearance. In the 143 west the lode is 1 foot wide, yielding good stones of tin in places. In the 133 cross-cut, north of the engine lode, towards Allen's branches, there is no change to notice; we expect in about 6 feet to intersect the same at this point; the stope in back of the same level, on the engine lode, is worth 3*l.* per fm. In the 123 cross-cut north, in search of more branches, there is no change to notice; the stopes in bottom of the same level east, on Allen's branches, are worth on an average 10*l.* per fm. The stopes in back and bottom of the 113 east, on Allen's branches, are worth on an average 11*l.* per fm. The 103 cross-cut south, on Allen's branches, towards the engine and Wallis's lodes, are still showing indications of our near approach to the lodes; the stopes in back of the same level east, on Allen's branches, are worth on an average 12*l.* per fm.

WHEAL UNION.—T. Glanville, Feb. 10: Tutwork Setting: The flat-rod shaft to sink below the 88, by nine men, at 48*l.* per fm. The lode in bottom of the shaft is 7 ft. wide, composed of spar, mundic, and copper ore. The 76 to drive east of flat-rod shaft, by six men, at 8*l.* 10s. per fm.; the present end is still in the cross-course. The engine-shaft to sink below the 40, by nine men, at 60*l.* per fm. The 60 cross-cut to drive north from East Carn Brea, by six men, at 14*l.* per fm. The old engine-shaft to sink below the 30, by nine men, at 14*l.* per fm.; lode 2 ft. wide, producing a little tin. The winze to sink below the 30, by two men, at 6*l.* per fathom: lode 2½ ft. wide, producing saving work for tin.

WHEAL UNITY CONSOLS.—W. H. Reynolds, Feb. 11: In cutting the plat at the 70, in the east side of engine-shaft, we have taken down the lode for 6 ft. long; for the whole length taken down the lode is orey, and the furthest point reached we valued at the rate of 1 ton of good grey and black ore per fathom.

— W. H. Reynolds, Feb. 15: The lode in the 70, east of flat-rod shaft, will yield 1 ton of grey and black ore per fm. In the 70, west of winze, the lode yields ¼ ton of grey ore per fathom. No lode has been taken down in the winze since last report.

WHEAL UNY.—S. Coade, M. Rogers, Feb. 11: The incline-shaft is worth 10*l.* per fathom for the length of shaft, 9 ft. The 110, west of incline-shaft, is worth 10*l.* per fm. The rise over the 110, east of engine-shaft, is worth 10*l.* per fm. The winze sinking below the 100, east of engine-shaft, is worth 14*l.* per fm. The 80, east of Goodinge's shaft, is worth 7*l.* per fm. The machinery is in good working order.

YARNER.—R. Barkell, Feb. 15: The ground in the new shaft is still good, and fair progress is being made; during the week we had a floor of ground carrying flookan, with mundic mixed up with it. The lode in the 40 east is 5 feet wide, composed of capel, spar, mundic, and copper ore, and worth for the latter 2 tons per fm., and looks well for further improvement; the end is wet, and tight for driving.

FOREIGN MINES.

COPIAPO.—Checo Mine, Dec. 31: Estimated produce—

Class.	Quantity.	Quality.	Price.	Value.
Second class dark ore	512	18	16.. 11¾ rls.	$987
Third class ditto	128	10		
Third class smalls	32	10		
Total	672			

The 70, east of Price's shaft—South Lode: The lode in this chiflon is just the same as when last reported, very promising. The 65, Price's shaft—Main Lode: The lode in this chiflon has become very wide and poor; this we shall stop, as the 75 fm. level end will prove this ground, and the chiflon is all but as deep as this level. The 75, Price's shaft—Main Lode: The lode in this end, driving west, is now 5 ft. wide, all full of very fine ore, but not to value as yet. The 75, Price's shaft—Main Lode: The lode in this chiflon is much the same as when last reported; this we shall also stop, and put the men to break a little metal from some of the branches that we have left from our old bunches.—Eastern New Ground: We have again commenced to work; nothing good as yet; this ground we cannot let go on any account, because at the 78 the south lode goes into it.—Western Sett: In the 40 fm. level, north of new shaft, the lode driving west, is 2½ ft. wide, but still poor. The mine wants a little perseverance as yet. —G. MATTHEWS.

PONTGIBAUD.—Capt. Rickard, February 1: Pranal: The 70 north, on Susan's lode, has met with the slide, which has deranged it at this point. The 50 metre level north, on the same lode, yields a little ore that will work on tribute. The same level, on the eastern part of Susan's lode, yields ½ ton of ore per fm. We have cut this part of the lode in the 30 metre level, which looks kindly, and yields ⅛ ton of ore per fathom. The 30, north of Geille's winze, yields stones of ore. The same level, south of Cohadon's winze, yields 12 cwts. of ore per fm. The 8 north is still in hard ground; the lode is small and poor. The cross-cut west of No. 2 lode, at this level, is without change to notice. Our tribute pitches continue to yield moderately.—La Brousse: The sinking of Basset's shaft from surface proceeds well; it is now down 36 metres 50 centimetres. The shallow level, south of the little shaft, is improved in value, now yielding 1½ ton of ore per fm. The stope in the back of this level yields 2 tons of ore per fathom.—Mioche: The rise in the back of the 100 metre level, north of Taylor's shaft, on No. 2 lode, yields good stones of ore. In the rise, on No. 3 lode, we have set to cross-cut the western part; the part risen on is unproductive. The winze sinking below the 80 metre level, on No. 2 lode, being poor is suspended, and the ground about it set on tribute. The clearing and reparing of the adit north, on No. 6 lode, proceeds satisfactorily. There is no change in the adit cross-cut, west of the Railway level.—La Grange: In the 40, north of Nosky's shaft, we have set to cross-cut the lode to its full width; the part driven on yields ¾ ton of ore per fm. The same level, south of shaft, is unproductive. The 20 north is also unproductive; we have driven through the western part of the lode in this level, about 30 metres behind the end, and find it produces orey ground for a width of 3 metres, which will work on tribute. The adit north is in a large lode, but produces no ore. Our stopes and tribute pitches yield a tolerable supply of stuff for the lavories.—Roure: The sinking of Richard's shaft below the 80 metre level goes on well, the ground being very favourable. The 80, south of this shaft, is poor. The 60 south yields ¾ ton of ore per fm. The 40, south of Agnes' shaft, yields 1 ton of ore per fm. The 20, south of the same shaft, is in a kindly lode, showing spots of ore, but not enough to save. Virginie's shaftmen, at this level, are engaged in cutting top-plat preparatory to beginning to sink the shaft, and cut the trip-plat. The adit south is suspended for a time to repair the stoiten near Virginie's shaft, in order to bring away the stuff through that level; we hope to resume it in a few days. We are still driving the side level in the stollen, but hope to get it finished and the rail-irons laid in about 10 days more. Our stopes throughout this mine, 19 in number, yield a large quantity of stuff; we have also 32 pitches, varying in price from 25 to 120 francs per ton of ore, 50 per cent.—Sur

disordered by slides and cannter branches, but by driving a little north we got at the north part of this lode, and we are driving on its course towards Juan's winze, and in about three weeks hence we hope to communicate this adit with San Rafael adit, which will greatly facilitate our operations in both these levels, and without air-machines. The ground in the new cross-cut, driving south towards Carrera's lode, is without alteration to notice. We send a copy of the plans and sections of San Pantaleon and San Carlos Mines. Our returns from both mines for Dec. month have been 54 tons 14 cwts., at an average assay of 83·4 ozs. of silver per ton of ore, or 4562·6 ozs.

The superintendent writes that although he cannot refer to any great change in the company's affairs, yet he hopes that the improvement in the mine of San Carlos may materially help in re-establishing the prosperity of the enterprise. The researches instituted in San Pantaleon Mine, with the object of recovering the heaved portion of the lode, east of the great cross-course, are being followed up and extended. In San Carlos, the improved return of 36 tons 12 cwts. of ore was made, which, at the very favourable assay of 94 ozs., are equal to a total of 3440 ozs. 4 dwts. The improvement which took place in the San Rafael level at the beginning of the past month continues, the end being worth ⅛ ton of good ore per vara, or rather more than 1 ton per fm. At the hacienda, four barrels continued working with mineral, and four with slimes, of which latter there is still a large stock. It was intended to dispatch the 25th conducta with 17 bars of silver on Jan. 6, the value of which would be about $13,600. Some men were engaged in working and bringing in samples of minerals from different points. Some good assays have been made, and he hopes by thus searching about that something may be discovered to warrant a more formal trial.

WEST CANADA.—Capt. Plummer, Jan. 16: Huron Copper Bay: The lode in the 30 fm. level is worth 1½ to 2 tons per fm., very promising. We have fixed a new lift of pumps to draw from the 30, which is completed and goes on well. The 10 fm. level is poor, but the lode is increasing in size and improving in value. The stope east of new shaft is worth 3 tons per fm. The stope west of Palmer's is worth from 5 to 6 tons per fm. The lode in the 30, west of Bray's, is worth 3 tons per fathom, and that going east is of the same value; the prospects here are favourable. The lode in the winze below the 20, east of Bray's, is small, and not of much value. The stope east of this has reached the boundary line between the Wellington and Copper Bay, and will, therefore, be reckoned in the future for Wellington, instead of Copper Bay, which, while it lessens the returns of the latter, will increase that of the former.—Wellington: Level going west of Grenfell's shaft yields 2 tons per fathom; lode large and kindly. Stopes east and west of Rowe's will yield 2½ tons per fathom. Stope on the east of Hooper's yields 3 tons, and that on west of Rowe's 2½ tons per fathom; lode at those points has improved. The lode west of Jack's winze yields about 1¼ ton, and on west of Knight's and Crebo's winzes 2 tons per fathom respectively. The shaft now being sunk on the north lode continues much the same. The prospects are favourable. All our operations are going on favourably. The new engine has been completed for some time, and we have made several trials of it; it works admirably. Some parts of the dressing machinery are not yet ready; therefore we have not commenced crushing, but we hope to have everything in full operation in a few days.

NOVA SCOTIA LAND AND GOLD.—The directors have received by the present mail a remittance of 29 ozs. 1 dwt. 12 grs. of gold. From Oldham the agent writes:—Our mining operations are progressing favourably, and the prospects looking much more encouraging than for some time past. I gave a contract to raise 100 tons of quartz and slate from Davies's lode for £1 per ton; about 60 tons have been raised, of which 39 tons have been crushed, yielding 22 ozs. 12 dwts. retorted gold. The yield per ton may appear small, but when you learn we crush everything that is taken out of the shaft, about 3½ feet thick, consisting of quartz and slate, you will see that it is a large return, and cannot fail to be a remunerative property. We are now working at a great disadvantage on account of the quantity of water we have to contend with; this difficulty will shortly be overcome, when the tunnel we are now driving cuts the ground in the neighbourhood of this lode, which will dry the whole block.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CASTELL CARN DOCHAN GOLD MINE.—The return of Gold, two and a-half days' working, for the week ending Feb. 14 is 2 ozs. 1 dwt. 21 grs., from 7 cwts. of quartz. Our machines are all frozen up since the morning of the 10th. We found some gold on the 14th in the south-west stope.

GREAT WHEAL VOR.—The mine continues to look remarkably well. The lode in Ivey's shaft holds down rich on its great course of ore, worth 400*l*. They are cutting tip-plat at the shaft, and taking the lode 12 ft., worth 400*l*. The lode in the 162, east and west of Ivey's shaft, is very productive. The 174, east of Metal shaft, stretching on towards Slithney Wheal Metal boundary, continues still worth 100*l*. per fathom. The tin sale for the month realised close upon 4000*l*.

At GUNNISLAKE (Clitters) the new whim-engine is set to work, and answers well. The 40-in. cylinder pumping-engine will be put to work in a few days. Both engines were manufactured by Nicholls, Williams, and Co., who deserve credit for the short period of time they took to execute the order. Good returns may now be expected both in tin and copper. The mine is creditably managed by Capt. W. Skewes, and dividends may be expected.

GREAT DEVON AND BEDFORD (Colcharton) MINE is looking well, and daily improving. At the 30 the lode is worth from 10*l*. to 12*l*. per fathom. The ore is yellow and coated, and bears out the various reports given by the many first-class agents who have inspected it. The general opinion is that this will make a first-class mine. The freehold is the property of the company, and the dues their own.

EAST JANE.—The lode in the 36 has been met with much more productive than anticipated; the western part has been cut into 6 ft., and found to contain some fine lumps of lead. No west wall yet reached, and a course of lead may be met with here at any time. The 26 north is also producing some stones of lead, much more promising than the levels above. The 26 south end is further in advance than the upper levels, in which a nice looking lode has come in, yielding full 3 cwts. of lead per fm., and improving as they drive, whilst improvements are fully expected shortly from two or three important points.—SOUTH JANE lies directly to the south on the same lodes; it is believed that operations will be commenced here shortly, and from the favourable indications the lodes present, there can be little doubt as to the results.

CARN CAMBORNE is opening up a good mine; the samplings are increasing, and the floors look as if the next sampling will far exceed any former one. It was predicted a short time since in the Journal that the samplings would more than double in quantity. The sampling following that announcement was 45 tons, the next 80 tons, and in the parcel now preparing for sale there will be at least 120 tons, with a prospect of an increase in future. The mine has been gradually improving for several months. I find the ore-producing places are as follows:—The south lode, in the 40 west, 3 tons; 40 east, 1 ton; a rise in back of the 40, 2 tons; 30 east, ¼ ton; 30 west, 2 tons; a stope in back of the 30, 3 tons; a winze sinking in bottom of the 30, 2 tons; this winze will soon be holed to the 40, when there will be a fine piece of ore ground laid open for stoping.—North Lode: A stope in back of the 30, 2 tons.—Clark's Lode: The 13 west, 1 ton; two stopes in back of the 13, 1 ton each. It is expected the lode will be in the sump-shaft in sinking about 6 ft. deeper, which is looked upon as being very important. Should it be cut as good as in the 40, Carn Camborne will not only be a self-supporting mine, but will leave a profit. There is not a young mine in the whole of the Camborne district that has done so much in so short a time. The next sampling, in a fortnight, will treble what it was in July last, yet the shares are not above half the price they were then.

WHEAL BULLER has greatly improved since the meeting in January. Tuesday last was the day for opening the tenders, as per advertisement, but, as no tender was received, it was proposed that a cross-cut be driven to cut the lode in the 70, which has been cut so rich in the 60 cross-cut since the January meeting, and to put on a full pare of men to drive the 60 east, where great results are expected. There are several other important points that will be arrived at before the next meeting, on March 21, which meeting will be made special. They have sold 9 tons of tin that has been broken within a month. Buller has not looked so well for a long time as now. The agent said at the meeting, on Tuesday last, that the mine was paying cost, and that no call would be required at the next meeting. It is not too much to say that, from present appearances and future prospects, Buller has seen its worst, and that brighter days are dawning upon it. May it be so, is the sincere desire of all who wish success to mining. Buller is not the only mine that has given good profits, afterwards become poor, then rich. Witness Dolcoath, in 1856, shares were offering at 10*l*., no buyers; and in East Pool, many offered at 10*l*., in 1850; United Mines were sold at 27*l*. about the same time, afterwards realised 1100*l*. for the same share. Buller has been as high as 14,000*l*. Who can tell that by perseverance and good management the same results may not follow Buller as have taken place in Dolcoath, East Pool, United Mines, Wheal Basset, and many others in the immediate district? Buller commenced in 1848, made two calls, one 7*l*. 10s. and one 2*l*. 10s., up to May, 1861; a nett profit of 243,392*l*. was made. What mine has done better in so short a time, about 13 years?

THE GREAT DEVON AND BEDFORD (COLCHARTON) COPPER MINING COMPANY.—The report from Capt. J. Richards is of a most satisfactory character. It states that a decided improvement of an important character has taken place in the lode in the 30, driving west, which will produce full 2 tons of yellow copper ore of good quality per fathom, and indicates every appearance of further improvement. This is a point of considerable importance.

THE FURSDON MINE.—It is reported that although the subscription list of the Fursdon Mining Company is not yet filled up, no doubt exists as to a sufficient number of shares being subscribed. It is considered that the genuineness and straightforwardness of the investment could not be overlooked by the public, and that the directors would have been fully justified, in consideration of the amount of work done in the mine, and the machinery erected (sufficient for years to come) in demanding a premium for the new shares. The mine has elements of success not to be found in many others of greater name and more pretensions.

OLD GUNNISLAKE MINE.—The company formed for developing this mine, and to the publication of whose prospectus reference has already been made, has given notice that their subscription list will close on Tuesday for London, and on the following day as regards country applications. It is stated that a large proportion of the shares has been subscribed for, and that immediate application is necessary to secure an allotment.

GREAT NORTH LAXEY.—The effect of vigorous working, with ample capital, is already being felt at this mine. The lode in the north end of the bottom of the shaft is worth full 2 tons of lead ore per fm. The lode itself in the bottom is more contracted, but Capt. Rowe states that "it is one of those 'nips' that in Great Laxey unfailingly attends close to our best bunches of ore; there is nearly always a 'pinch,' or 'nip,' in the lode, just before it is going to widen out good." In the 60 south the lode is greatly improved, being worth 1 ton of lead ore per fm., besides blende. The opinion entertained by many for some time past, that this mine will be one of the next great prizes, seems likely to be realised at no distant day.

A quicksilver mine has been discovered in Valparaiso, in the Quebrada de San Augustin, which promises well, although awkwardly situated under several houses.

THE SUN AS A MOTIVE POWER.—The Sun, it appears, is about to be put to a new use, quite apart from photography. M. Mouchot, of the French Institute, according to a contemporary, suggests that he may be turned to account as a motive power, like steam. "If a thin silver bell, blackened within, be filled half with water and half with air, and exposed to the Sun's rays transmitted through two bell glasses, the air will expand and press upon the water." Here at once is a motive power, but the ingenious inventor of the bright idea does not seem very sanguine as to the practical value of his discovery, except in Africa or India, where, as he says, "the sun costs nothing."

MUNTZ, E. G., METAL BROKER,
32, PARADISE STREET, BIRMINGHAM.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, FEB. 17, 1865

	£	s.	d.	£	s.	d.
COPPER.						
Best selected....p. ton	89	0	0-	90	0	0
Tough cake..... „	87	0	0-	88	0	0
Tile ..... „	87	0	0-	88	0	0
Burra Burra .... „	92	0	0-	—		
Copper wire .....p. lb.	0	1	0-	1	0	¼
ditto tubes ..... „	0	1	1-	—		
Sheathing & bolts p. ton	93	0	0-	—		
Bottoms ..... „	100	0	0-	—		
Old (Exchange).... „	91	0	0-	—		
IRON.	Per Ton.					
Bars Welsh, in London..	7	5	0-	7	10	0
Ditto, to arrive	7	5	0-	—		
Nail rods	8	10	0-	—		
„ Stafford. in London	8	15	0-	9	15	0
Bars ditto	9	0	0-11	0	0	
Hoops ditto	9	15	0-10	10	0	
Sheets, single	10	10	0-11	0	0	
Pig No. 1, in Wales....	4	10	0-	—		
Refined metal, ditto....	4	0	0-	5	0	6
Bars, common, ditto....	6	15	0-	7	0	0
Do., merch., Tyne or Tees	7	10	0-	—		
Ditto, railway, in Wales	6	10	0-	7	0	0
Ditto Swed. in London.	11	10	0-12	0	0	
To arrive	12	0	0-	—		
Pig, No. 1, in Clyde....	2	11	3-	2	17	6
Ditto, f.o.b. Tyne or Tees	2	9	6-	—		
Ditto, Nos. 3, 4, f.o.b. do.	2	6	6-	2	5	6
Railway chairs.....	5	10	0-	5	15	0
„ spikes.....	11	0	0-12	0	0	
LEAD.						
English Pig, ordny. soft	20	7	6-	—		
Ditto (WB)	21	10	0-21	15	0	
Ditto sheet	21	5	0-	—		
Ditto red lead	22	0	0-	—		
Ditto white	26	0	0-26	5	0	
Ditto patent shot.....	23	0	0-	—		
Spanish	19	10	0-	—		

	Per.	lb.		
BRASS.				
Sheets	9¼d.	—		
Wire	9d.	—		
Tubes	9¾d.	—		
STEEL.	Per	Ton.		
Swedish, in kegs (rolled)	15	10	0-15	16	0
„ (hammered).	16	0	0-18	0	0
Ditto in faggots.....	17	0	0-18	0	0
English, Spring	19	0	0-23	0	0
Bessemer's, Engineers Tool	44	0	0-	—	
„ Spindle	80	0	0-	—	
QUICKSILVER (per bottle).	8	0	0	nom.	
SPELTER.	Per	Ton.		
Foreign	19	0	0-	—	
To arrive	19	2	6-	—	
ZINC.				
In sheets	24	10	0-	—	
TIN.				
English, blocks	97	0	0-	—	
Ditto, Bars (in barrels)..	98	0	0-	—	
Ditto, Refined.....100	0	0-	—		
Banca	94	0	0-95	0	0
Straits	89	0	0-	—	
TIN-PLATES.*				
IC Charcoal, 1st qua. p. bx.	1	7	0-	1	10	0
IX Ditto 1st quality „	1	13	0-	1	16	0
IC Ditto 2d quality „	1	5	0-	1	7	0
IX Ditto 2d quality „	1	11	0-	1	13	0
IC Coke ..... „	1	1	6-	1	2	9
IX Ditto..... „	1	7	6-	1	8	9
Canada plates ....p. ton	13	10	0-	—		

In London; 20s. less at the works.

Yellow Metal Sheathing ...p. lb.	8d.-	8½d.	
Sheets.....p. lb.	8d.-	8½d.	
Indian Charcoal Pigs in London	7	0	0- 7 10 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The Metal Market still remains in a most unsatisfactory state, and the slight improvement previously noticed seems now to have stopped, and business in the metal trade generally to have resumed its former condition of dulness and inactivity. The anticipated prospect of peace between the conflicting powers in America was hailed with much pleasure, and it was earnestly hoped that the desired cessation of hostilities would be brought about, and an eventual, if not speedy, return to a condition of peace, by which a great improvement would at once have been made in our commercial transactions with that country, which have been so severely and unfortunately interrupted by the present war. However, these anticipations are now at an end, as the recently received intelligence informs us that the negociations for peace have failed, and consequently nothing now remains but a vigorous prosecution of the war. In the present state of the metal trade this is exceedingly disappointing, but we must continue patiently to wait for the time when this unfortunate war shall come to a termination. The advices from China regarding metals are more favourable, and there appears to be a fair market for most descriptions of iron, while spelter is stated to be much wanted. This is so far satisfactory, and will probably give a slight stimulus at least to business in that direction. The advices from India report that metals still continue very dull there.

COPPER.—The market still continues inactive, and the demand very limited; the price of manufactured has further declined, and may now be quoted at 93*l*.

IRON.—In Staffordshire there is a decided improvement in the demand for manufactured iron, which partly arises from the necessity which buyers, who have so long been holding back, find to send their orders, and partly from the strike of the puddlers in North Staffordshire, which sends specifications to the South. Orders are gradually coming in from North Germany, in anticipation of the re-opening of the Baltic navigation. Few of the works, however, are fully employed, and there is no improvement from the United States. On Thursday a very numerously attended meeting of ironmasters was held at Birmingham, for the purpose of considering what steps should be taken in reference to the strike on the part of the puddlers in North Staffordshire, at which the following resolution was unanimously adopted:—"It having been officially announced that the strike of the puddlers in North Staffordshire has been directed by the executive of the Puddlers' Union, and it having been ascertained that weekly contributions are regularly being levied and paid by the men employed in other districts in support of the strike, we, the undersigned, do hereby agree that we will give 14 days' notice on Saturday (this day) to close our works, unless the men of North Staffordshire shall before the expiration of that notice have returned to work at the same reduction in wages as has been accepted by the men in other districts." This resolution was signed by all the ironmasters present at the meeting. In Wales all the men at the works have resumed their work at the reduction, so that the district is saved from the serious consequences of a strike. There is a little better enquiry. For the week ending Feb. 9 the exports were 1051 tons. Swedish iron is still looking better. In Scotch pig-iron the fluctuations have not been very great during the week. The reported renewal of peace negociations in America caused the market to advance, and business was done at 50s. 7½d. cash, and 50s. 10½d. one month; but on the report of the failure of the negociations the market again flattened, and business was done at 50s. 1½d. cash, and 50s. 4½d. one month, at which the market closed.

LEAD.—The market remains quiet, and prices are without alteration.

TIN.—The late improvement in foreign has not yet entirely disappeared, and prices have again become lower. S[illegible]y now be quoted at 89*l*. cash, and Banca at 94*l*. to 95*l*., but the [illegible] of business transacted has been very limited.

SPELTER has become less firm than it it was last week, and the price has given way; sales on the spot have taken place at 19*l*.

TIN-PLATES.—Some of the makers have orders on their books, while others are increasing their stocks.

STEEL and QUICKSILVER without alteration.

THE LIVERPOOL METAL MARKET—FEB. 16.

[FROM OUR CORRESPONDENT.]

PIG-IRON.—A flat market prevailed till yesterday, when, in consequence of the decided peace tendency of the American news, per *Canada*, pigs advanced 1s. to 1s. 6d. per ton, and a fair business was done. This morning's news, however, advising the failure of the peace conference between South and North, sickened the market, and prices dropped to old quotations.

MANUFACTURED IRON.—Early in the week one or two good specifications for Welsh bars were given out, but at very low prices; one of the largest houses in South Wales offered to enter 500 tons of bars at 6*l*., but the offer was declined. A few contracts have changed hands in plates for shipbuilding, but at ruinous prices. We have it on the best authority that a well-known Staffordshire firm booked a contract for plates for a 1500 tons ship, at 8*l*. 15s. per ton all round. Middlesbro' iron finds its way to Liverpool just now in considerable quantities, and at very low prices. Several large shipbuilding orders have been sent there from the Mersey during the last few weeks. The business in Staffordshire iron has been very limited, and underselling still prevails. We regret very much to find that the foolish conduct of the North Staffordshire puddlers and millmen has compelled the associated ironmasters, at a meeting held to-day, largely represented by every district, unanimously to resort to a general lock-out. Being in possession only of bare telegraphic information on this point, we can hardly form an opinion as to the probable result, but would hope sincerely that, in the present seriously depressed state of the iron trade, the men will see the madness of further resisting the reduction of wages, and will quietly submit. There is not the slightest immediate prospect of any improved demand for the States, and the stocks of English iron in New York are very heavy. We can assure the men, as far as Liverpool is concerned, there is no possibility of an improved trade, even at lower prices than at present prevail; so that if the masters continue unanimous, and they refuse to come in at the reduction, the masters will have the whip-hand of them in the struggle.

TIN-PLATES.—A good trade was done yesterday at full prices, owing to the American news, but the market is down again to-day. Quotations are 21s. IC coke; 25s. and even 24s. 6d. for IC charcoals.

SPELTER.—Trade a little brighter, but nothing to boast of.

TIN.—Some little trade has been done in Straits and Banca, but English has been drooping; buyers are looking for a further reduction.

LEAD somewhat better than our last report.

COPPER continues dull, with holders anxious to sell.

EXPORTS OF IRON AND TIN-PLATES.—Returns are a little behind time; will report next week; are very small, especially to the States.

IMPORTS OF METALS, &C., FOR WEEK ENDING FEB. 11.—600 tons sulphur, 300 cantars brimstone, 2 packages zinc, 551 bars tin; 156 packages, 678 bags, 216 casks, 10 boxes silver ore; 117 tons pig-iron, 11,651 bars copper, 75 tons pig-copper, 13,280 quintals copper ore, 275 sacks copper barilla, 34 boxes copper minerals, 270 tons manganese, 6564 bars iron (from St. John's), 36 cast-steel tuyers. We also note 1212 wrought-iron girders from Antwerp.

Five steamers were launched yesterday from Messrs. Jones, Quiggin, and Co.'s yard, in this town. Four were launched together, and the fifth shortly after. This fact will give your readers some notion of the growing importance of Liverpool as a shipbuilding port.

BIRMINGHAM, FEB. 17.—Rylands' "Iron Trade Circular" reports—Business quiet, awaiting result of general movement by ironmasters of Great Britain against Strikes, by a fortnight's notice to lock-out. Prices: Pigs, common forge, 2*l*. 15s. to 3*l*. 5s.; melting, 3*l*. 2s. 6d. to 3*l*. 7s. 6d.; mine forge, 3*l*. 5s. to 3*l*. 15s.; better class, 4*l*.; hydrates, 4*l*. 7s. 6d. to 4*l*. 15s.; hematites, 3*l*. 7s. 6d. to 4*l*. 5s., according to quality; foundry, 3*l*. 12s. 6d. to 3*l*. 15s.; North Staffordshire, 3*l*. to 3*l*. 5s.; Cleveland district, grey forge, 3*l*. 1s. 6d. to 3*l*. 8s.; melting pigs, No. 1, 3*l*. 8s., long weight, delivered in this district; Shropshire cold-blast, 4*l*. 10s. to 5*l*., delivered into this district; Spiegeleisen. 6*l*. 10s. to 6*l*. 15s.; second quality, 5*l*. 10s.; puddled steel, 12*l*. 10s. per ton; cast steel block (raw), 1*l*. 6s. per cwt.; cast hammered, 1*l*. 14s. per cwt., f.o.b. at Hull; spiegeleisen ore, 20s. at Rotterdam; first-class white and mottled pig steel iron, 6*l*. per ton in Liverpool or Birmingham; manufactured iron, marked bars, 8*l*. 10s.; hoops, 9*l*. 10s.; sheets, singles, 10*l*.; doubles, 11*l*. 10s.; lattens, 13*l*.; angles, 8*l*. 5s. to 9*l*.; gas strips, 8*l*. 10s. to 8*l*. 15s.; nail sheets, 8*l*. 10s. to 9*l*.; the commoner makes of our district in bars are being quoted at 7*l*. 5s. to 8*l*. 5s., at works; puddled bars, 6*l*. to 6*l*. 10s.; scrap bars, 6*l*. 10s. to 7*l*., according to quality; best puddled drawing wire, list price, 11*l*. 10s., but makers have relaxed 10s., and so quote at 11*l*.; North Staffordshire bars, 7*l*. 5s. to 8*l*.; best, 8*l*. 5s. to 8*l*. 10s.; best best, 8*l*. 15s. to 9*l*.; rivet iron, 9*l*. 10s.; fencing wire, 10*l*. 5s.; best puddled drawing wire, 10*l*. 15s.; best angles, 9*l*.; best hoops, 9*l*. 5s. to 9*l*. 10s.; best waved hoops, 9*l*. 10s. to 9*l*. 15s.; best plates, 9*l*. 15s. to 10s.; common, 9*l*. 5s. to 9*l*. 10s.; puddled bars, 5*l*. 10s. to 6*l*., delivered at Manchester, Liverpool, or this district; Welsh bars, 6*l*. to 7*l*.; Welsh rails, 6*l*. 15s. to 7*l*. 2s. 6d., at works; Welsh puddled bars, 5*l*. 10s., delivered to stations in this district. It must be remembered that these prices are quoted "at works," unless when otherwise specially mentioned.

THE COPPER TRADE.—Mr. J. Pitcairn-Campbell, of Liverpool, reports—Although the demand for English copper does not show much improvement a better business has been done in Chili, at an advance of 20s. per ton on the spot, with a speculative enquiry to arrive. Transactions during the fortnight have been—

Feb. 1.—680 tons Cobre ore, at Swansea, ex "Cobrero"	£ 0	16	6¼	per unit.
„ 2.— 10 tons Urmenita ingots, on spot here (less 3 per cent.)	88	0	0	per ton.
„ 2.—340 tons regulus, at Swansea, "John".....	0	16	6	per unit.
„ 4.—100 tons bars, on spot here, "E. Herbert" (less 2½)..	80	0	0	per ton.
„ 6.—205 tons bars, on spot here, "D. Brundritt" „	80	0	0	„
„ 7.— 20 tons bars, „ „ „	80	0	0	„
„ 10.— 50 tons bars, „ „ „ (nett 2 months)	78	10	0	„
„ 11.—150 tons bars, to arrive, "Arica" (less 2½ per cent.)..	81	0	0	„
„ 11.— 80 tons bars, on spot here, "D. Brundritt" (less 2½)	80	0	0	„
„ 11.— 10 tons bars, on spot here, "E. Martin" „	80	0	0	„
„ 11.— 65 tons bars, on spot here, "Zehlima" „	80	0	0	„
„ 11.— 4 tons bars, on spot here, "Mindanao" „	80	0	0	„
„ 11.— 23 tons bars, on spot here, "Llama" „	80	0	0	„
„ 14.— 50 tons bars, to arrive, "Arica" „	81	0	0	„

Quotations are 16s. 6d. to 16s. 9d. for ore and regulus, and 80*l*. to 81*l*. for bars—Barilla being rather nominal. Stocks of Chili copper ores, &c., likely to be available, as near as it is possible to estimate them are as follows:—

	Ores.	Regulus.	Bars.
Liverpool	2848	1110	2929
Swansea	3809	717	960

Arrivals from the West Coast, S.A., since my last have been—

	Ores.	Regulus.	Bars.	Barilla.	Ingots.
"Cape Horn," Guayacan	—	770	365	—	—
"Warwickshire," Tongay	995	—	—	—	—
"Bolivia," Caldera	—	114	—	—	—
"Mary Lee," Tocopilla	575	157	—	—	—
"Coro Coro," Caldera	603	—	—	—	—
"D. Brundritt," Valparaiso ..	—	—	263	—	—
"C. Colon," Colon	—	—	—	5	70
"J. S. Stowe," Coquimbo	350	330	120	—	—

TIN.—The market is quiet; considerable sales of Straits have been made at 89*l*. to 89*l*. 10s.

A fair amount of business has been transacted this week in the MINING SHARE MARKET, and it remains steady, and not subject to the violent fluctuations of a few weeks back. The mines most in demand have been Great Devon Consols, Great Wheal Vor, Great Laxey, Great North Laxey, Wheal Trelawny, Wheal Grenville, East Grenville, East Vor, Hingston Down, West Seton, Wheal Crebor, West Tolgus, Prosper United, Frank Mills, Clifford Amalgamated, Carn Camborne, East Russell, Wheal Unity, Herodsfoot, and a few others. East Grenville shares have been in good demand, and risen to 4¼, 4¼; the lode in the 75 west has improved to 6 tons of ore per fm. Wheal Grenville shares have also been more dealt in, at 2¾ to 3. Carn Camborne, 20s. to 24s.; Cook's Kitchen, 8¼ to 9; East Basset shares very flat, at 29 to 30; East Caradon shares firmer, at 13¾ to 14¼. West Chiverton, 63 to 66; at the meeting, on Wednesday, the accounts showed a profit of 3393*l*. 5s. 8d. on the three months, and a dividend of 15s. per share (2250*l*.) was declared, leaving a balance in hand of 7090*l*. 13s. 3d.; the report states that next week driving will be commenced in the 80, on Williams's, on a lode worth 80*l*. per fm. in each end; the 80 west is worth 30*l*. per fm.; No. 1 winze, 100*l*. per fm.; No. 2 winze, 120*l*. per fm.; No. 3 winze, 120*l*. per fm.; since the last meeting, Burgess's shaft has been holed to the 70, and sunk 3 fathoms below; in the 70 a new branch of lead, worth 40*l*. per fm., was discovered. The mine, the agents state, at no former period, has looked so promising for making deep as well as long and lasting courses of ore; and at the next meeting there will be no difficulty in increasing the dividends. Wheal Chiverton, 5¾ to 6¼; the accounts at the meeting showed a balance in hand of 714*l*. 16s., and the prospects of the mine improving; at Murray's, the shaft has been cleared to within 2½ fathoms of the 60; in the back of the 50 there is a lode worth 18*l*. per fm. As the bottom levels in West Chiverton (which are, it is said, much below the bottom part of Wheal Chiverton) are now so productive, it speaks well for Wheal Chiverton when drained; and though the difficulties hitherto in this respect have been serious and disappointing, better progress will, it is hoped, be made in future.

At Chiverton Moor the accounts have shown 1444*l*. 17s. 11d. in hand, and the report of a very encouraging character. East Rosewarne, 2¼ to 2¾; Great Wheal Vor, 33½ to 34½; Grylls Wheal Florence, 20s. to 25s.; Hingston Down, 3¼ to 3¾; Mineral Bottom, 5 to 6; North Downs, ¼ to ½; North Roskear, 15 to 16; North Treskerby, 2¼ to 2¾. Wheal Crebor, 38s. to 40s.; at the meeting the accounts, after charging everything up to the end of January, showed assets over liabilities 219*l*. 10s., but a call of 1s. per share was made. The report shows two or three important points to come off, particularly in the 108, or bottom level, which has just been commenced driving. In the bottom of the 96 the lode has gone down in advance of the 108 end, worth 6 tons of copper ore per fm., speaking well for the 108. The ore for sale on the 23d, 124 tons, was the produce of three months, and since the sampling 70 tons more have been raised, so that the next sampling ought to yield a good profit. The finances of the company have been placed in a situation that no other non-dividend paying mine can boast of, and the mine has a great advantage in being worked cheaply through water-power sufficient for all purposes; thus saving the expense of steam-engines, coals, and other heavy items of monthly cost. As for its situation, we have often explained that it adjoins Devon Great Consols, and must ere long take an important position. It is not a market mine, and subject to great fluctuations, but is working its way quietly and surely. Prince of Wales, ¼ to ½; Providence Mines, 32½ to 34½; Great Laxey shares have improved, and leave off at 17¾ to 18¼; the lode in the 110, we understand, is 12 ft. wide, worth 200*l*. per fm.; another stope, 6 ft. wide, is worth 120*l*. per fm. This is the lode of Great North Laxey, shares in which have been in great demand at 3 to 3¼. The official report this week states that the lode in the north end of the shaft, sinking below the 60, is worth 2 tons of lead ore per fm., and the ore appears to be dipping north, as is the case with all the large bunches of ore in Great Laxey. The 60 end has much improved, being now worth 1 ton of lead ore per fm., besides blende. South Darren, 2 to 2¼; the 60 is reported to be worth 20*l*. per fm., and the 50 also of the same value, so that

there are now five levels going west into rising ground, with a course of ore in each. South Lovell, 1¾ to 2¼. Clifford Amalgamated, 30½ to 31½, ex div.; at the meeting the accounts showed a profit of 1861*l.* 14s. on two months' working, and a dividend of 12s. 6d. per share (1800*l.*) was declared, leaving 70*l.* 6s. 5d. in hand. Taking the whole of this great concern, the prospects are very good, and the cost of the last two months heavier than usual, as there were new boilers and other machinery to erect and repair. St. Day United, 13s. to 15s.; Frank Mills, 6½ to 6¾. Stray Park shares are in demand, at 15s. to 16s.; Wentworth Consols, 8 to 8½; Wheal Basset, 100 to 102½; Wheal Seton, 192½ to 197½. Wheal Trelawny shares are in good demand, at 19½ to 20; Wheal Unity, 3s. to 4s.; Wheal Uny, 2 to 2½. West Seton, 200 to 202½, ex div. of 4*l.* per share, declared at the meeting, when the accounts showed a profit on the two months of 1450*l.* 13s. 11d., and a dividend of 1600*l.* declared, leaving 578*l.* 6s. 11d. in hand. The copper ores sold and to be credited in the account for April realised 5160*l.* 13s. 11d., and the agent hopes to have 200*l.* worth of tin. The lode in the 130 west, the most westerly end of the deep levels, is worth 30*l.* per fm. Other ends, in the aggregate, 17 tons of copper ore per fm. The winzes are worth 15½ tons per fathom. In the back of the 110 west, much further west than the 130 end, there are two stopes worth 5 tons of copper each. Also in the back of the 100 there is one stope producing 10 tons per fm., and a winze going below the 100 worth 9 tons per fathom. The tribute pitches are producing their usual quantity of ore. Great South Tolgus, 1¾ to 2¼. East Lovell shares have declined to 10, 10½. We understand that an influential gentleman has this week joined the direction of the Old Gunnis Lake Mining Company, and taken a large interest in it. No application for shares will be received after the 21st for London, and the 22d for the country.

On the Stock Exchange there has been a fair amount of business in Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—West Seton, 201; Great Laxey, 17½, 18, 17½, 18; Great Wheal Vor, 33½, 33¾, 34; East Grenville, 3½, 3¾; East Caradon, 14; East Lovell, 10½; Stray Park, 15. In Colonial Mining Shares the prices were:—General, 22½, 23; Yudanamutana, 1¾, 2, 1¾, 1¾, 2; Australian, ¾; Cape, 11½, 11¾, 11½; Port Phillip, 1¼, 1½; Dun Mountain, ½; Yorke Peninsula, ¼. In Foreign Mining Shares the prices were:—Montes Aureos, ¾; Santa Barbara, ¼, ¾; Mariquita, ¾; St. John del Rey, 34, 33, 34; United Mexica, 4¼, 4¾; Alamillos, 1⅜, 1¾; Lusitanian, 1¼, 1½; Don Pedro, ¾.

IRISH MINE SHARE MARKET.—Mining securities commanded considerable attention, and a fair amount of busines, both by investors and speculators, with a general tendency to firmness in prices, except in Connorree shares, which receded from about 20 to 12½ per cent. premium, being now quoted, after several transactions, at 22s. to 22s. 6d. per share (20s. paid). Wicklow Coppers, on the other hand, have been firm throughout, and gradually rose from 13*l.* (offered) to 14*l.*, and have been freely taken at 13*l.* 15s. (2*l.* 10s. paid). In Mining Company of Ireland shares few investments have been made, but speculators for time bargains have sustained previous quotations, without any marked fluctuations; for the 15th of July, 32*l.* 15s. has been accepted, and for a few cash transactions 31*l.* 2s. 6d., 31*l.* 3s. 9d., and 31*l.* 5s. Other mines have also been enquired for, but no dealings effected, holders not being disposed to sell at a sacrifice. The mineral traffic between the mines of the Vale of Ovoca and Kingstown Harbour, which had been suspended for a short time, has recommenced. At the Tralee borough election the O'Donoghue was returned by a large majority.

The Cwmricket Lead Mining Company, with a capital of 6000 shares of 1*l.* each, has issued its prospectus, the object of the undertaking being to work the sett of the same name at Llangurig, Montgomeryshire. The mine is about seven miles from Llanidloes, and has been carefully examined and favourably reported upon by several good and practical mine agents. The district is well known for its mineral character, and the purchase money is fixed at 1000*l.*, all in paid-up shares. Capt. S. Morris Ridge's report is appended to the prospectus, which will be found in another column.

The Val Antigoria Gold Mining Company, with a capital of 60,000*l.*, in shares of 2*l.* each, has been brought before the public during the past week, but as only 7500 of the 30,000 shares remained to be subscribed for, the success of the undertaking was guaranteed before its introduction; as it could not be supposed that the shareholders in a neighbouring mine would have subscribed for five-eighths of the shares unless they had the fullest confidence in the district, and the ability of those entrusted with the management of the mines. It was simply a trifling technical objection that prevented the purchase and working of the mine by the Vallanzasca Company, which is most successfully working a mine in the adjacent valley, no doubt being entertained that the Crodo Mine will prove fully as rich. The property, which is situated in the Val Antigoria, from which the company takes its name, will be registered in the name of the company; the only charges being the ordinary taxes, and 10 per cent. of the nett profit. The advantage of paying royalty upon profit, and not upon produce, is obvious. There is a good road to the mine, and the Alfenza, a large and permanent stream, will supply all the necessary motive power. The ore broken from the main lode gives from 1 to 2½ ozs. of gold per ton, and it is considered that 15s. to 1*l.* per share will be ample to complete the purchase, and bring the mine into a highly remunerative working order.

At the Minera Mining Company meeting, on Feb. 3, the directors declared a dividend of 7*l.* per share from the profit of the Christmas quarter.

At Dolcoath Mine meeting, on Monday, the accounts for November and December showed a credit balance of 2159*l.* 13s. 4d. The profit on the two months' working was 1526*l.* 1s. 3d. A dividend of 1790*l.* (5*l.* per share) was declared, and 369*l.* 13s. 4d. carried to the credit of the next account. Capts. Charles Thomas, William Provis, J. Tonkin, J. Thomas, and J. Bawden, in concluding their report upon the various operations at the mine, state that—"During the past three and a-half years, in erecting steam-engines and machinery, for pumping, drawing, and stamping, and in reconstructing a large portion of the tin-dressing floors, we have spent fully 8000*l.* These extra costs are now nearly brought to a close. During the past five years, by making various improvements, we have succeeded in reducing the cost of drawing, exclusive of filling and landing, from 1s. 6d. to 1s. per ton, for the weight drawn to surface. The dressing-cost is also considerably reduced. The average price of tin credited to-day is 87*l.* 1s., or 5*l.* 9s. per ton less than for the preceding six months, making a difference of 950*l.* on the whole amount credited to-day."

At West Wheal Seton meeting, on Tuesday, the accounts for November and December showed a credit balance of 2118*l.* 6s. 11d. The profit on the two months' working was 2118*l.* 6s. 11d. A dividend of 1600*l.* (4*l.* per share), was declared, and 518*l.* 6s. 11d. carried to credit of next account. The amount of copper ores sold for Jan. and February, also to come to credit of next account, is 5160*l.* 13s. 11d. Capts. Charles Thomas, Malachi Bath, and John Jennings reported that the tribute pitches are yielding their usual quantities of ores, and that they expect to have to the credit of next account 200*l.* worth of tin.

At the Herodsfoot Mine meeting, on Feb. 7, the accounts showed a profit on the four months' working, to end of December, of 1886*l.* 11s. 5d., and a balance of assets over liabilities of 3838*l.* 12s., and a cash balance of 1566*l.* 2s. A dividend of 35s. per share was declared. Messrs. Loam, Hawke, J. C. Isaac, and De Castro F. Lyne were elected members of the committee. Capt. Trevillion, in his report, says—"I congratulate the shareholders on the present encouraging state of the mine. The lead maintains its value for lead and silver, and the price realised for it is, on the average, quite as high for the past four months as it ever fetched. Under all circumstances, we may look forward with confidence for long and continued dividends."

At West Chiverton Mine meeting, on Wednesday (Mr. E. Burgess in the chair), the accounts showed a credit balance of 9340*l.* 13s. 3d. A dividend of 15s. per share was declared. Details in another column.

At the Clifford Amalgamated Mines meeting, on Monday, the accounts for November and December showed a credit balance of 1870*l.* 6s. 5d. The profit realised on the two months' working was 1861*l.* 14s. A dividend of 1800*l.* (12s. 6d. per share) was declared, and 70*l.* 6s. 5d. carried to credit of next account. Captain John Richards reported upon the various points of operation. In the Wheal Clifford district there are three stopes working in the bottom of the 200 fathom level, east of the United Mines boundary, worth 14 tons per fathom; four stopes in the back, worth 25 tons per fathom each, and the 220 fathom level end is of the same value. In the Consols district, the 60 fathom level, driving west, is of promising appearance. In the United Mines district, at Buzza's part, they are raising a large quantity of low-priced ore, and will continue to do so; it is probable that, as they go in depth, the quality of the ore will improve. Taking the whole of the mines, the prospects are very good; their cost has been heavy this two months, having new boilers and other machinery to erect and repair. They are raising the usual quantity of ore, but, like other mines, feel the drop in the standard.

At Chiverton Moor Mine meeting, on Wednesday (Mr. J. C. Isaac in the chair), the accounts showed a credit balance of 1444*l.* 17s. 11d. Details elsewhere.

At Chiverton Mine meeting, on Wednesday (Mr. E. Burgess in the chair), the accounts for the three months ending December showed a credit balance of 714*l.* 14s. The arrears of call amounted to 148*l.* 10s. Details in another column.

At the Glasgow Caradon Consols meeting, on Feb. 6 (Mr. A. Harvey in the chair), the directors' report and the financial statement were unanimously agreed to. The Chairman congratulated the shareholders on the prospects of the company, and remarked that, had the mine been in its present position six months since, there would have been no necessity for the proposed issue of new shares, but with a view to place the company in the best possible financial position, a proposition to issue, *pro rata* to present members, 10,000 new shares, of 1*l.* each, was submitted; 4s. per share would be called on the new stock, and, perhaps, no further call would be necessary. The resolution was unanimously agreed to. Captain William Taylor reported that, looking at the mine on the whole, he considered the prospects for the future exceedingly encouraging, especially on the counter lode, and if the 52 and 65 fathom levels, on this lode, fulfil expectations, they will return an increased quantity of better quality ore. The machinery is of the best description, and equal to all requirements. About 140 tons of ore will be ready for sale on March 2. Since the meeting Captain Taylor reports (Feb 13) that the 65 west, on the counter lode, is still rather slow for progress, but there are indications of a speedy change. They are pushing on the end to meet the driving from the bottom of the winze, under the 52, as fast as possible, this will give ventilation, and make available some valuable ore ground.

At the Bedford Consols meeting, on Thursday, the accounts showed a debit balance of 58*l.* 14s. 11d. A call of 1*l.* 6d. per share was made. Capt. J. Mitchell reported that they have about 8 fms. to drive the cross-cut north to intersect the engine-shaft lode. They have about 23 fms. to drive to intersect the tin lode, and 6 fms. to intersect the part of the lode which went off just under the engine-shaft. He recommends the same points to be pushed on, and is still of opinion that something good will be met with to remunerate the shareholders for their long patience and outlay.

At Wheal Buller meeting, on Tuesday, no tender having been received for the purchase of the mine, it was resolved that the agents be instructed to prepare for the abandonment of the mine, and that the bi-monthly meeting to be held on March 21 be made special to confirm this resolution. Defaulters are to be proceeded against, unless their arrears be paid within 14 days from date. Capts. Inch and Dyer reported that the tribute department is very much improved since last account.

At the Long Rake Mine meeting, on Thursday (Mr. Seaward in the chair), the accounts showed a debit balance of 495*l.* A call of 5s. per share was made. The report of the agent (Captain F. Evans) stated that since the last meeting there had been a steady and general improvement in the various workings throughout the mine, and he ventured to state that as they continued to develope the mine eastward a good and successful one would be the result. They calculated to sell during the coming quarter 100 tons of lead ore, but this estimate must be based on the supposition of their being able to work without let or hindrance, and the cost would be about the usual amount. Mr. Michell explained that the mine had been explored to a depth of 90 fms., and expressed his opinion that the deeper the explorations the better would be found the quality of the ore. A resolution was passed forfeiting all shares in arrears of call, but empowering the committee to restore them if the arrears be paid on or before March 1. A vote of thanks to the Chairman terminated the proceedings.

At the Wheal Crebor meeting, on Tuesday (Mr. J. Y. Watson, F.G.S., in the chair), the accounts (including the January cost) showed a balance of assets over liabilities of 219*l.* 1s. 10d. A call of 1s. per share was made. Details will be found in another column.

At the Reinnie Laxey Mining Company meeting, held at 12, Old Jewry Chambers, on Tuesday (Mr. Thomas Thompson in the chair), it was unanimously resolved, the whole of the shares having been subscribed for, to register the company under the provisions of the Companies Act, 1862. Messrs. Francis Housman, Robert Carwen, A. Robinson, T. Dowling, and F. W. Becker were elected directors. Further particulars of this company will be found in our advertising columns.

At Treweatha Mine meeting, yesterday (Mr. G. M. Bell in the chair), the accounts for the four months ending December showed a debit balance of 1016*l.* 18s. 6d. A call of 5s. per share was made. The relinquishment of 125 shares by Messrs. Leedman, Bartlett, Edmonds, Weatherhead, and Robson was accepted on payment of the 5s. call now made. Capts. Foote and Scoble reported upon the various points of operation. It was resolved to stop all works for the present, on account of the great increase of water in the shaft. The ore sold during the quarter realised 827*l.*

At the Consett Iron Company meeting of the directors, held in Newcastle, on Saturday, it was determined to pay an interim dividend of 7s. per share, clear of income tax, in respect of the operations of the half-year ended Dec. 31 last.

At the Montes Aureos (Brazilian) Gold Mining Company meeting, on February 28, the accounts to the end of December will show an unexpended cash balance of 18,321*l.* 11s. 10d. The balance on the profit and loss account is 1149*l.* 15s. 11d. The directors regret their inability to show any important results from the operations of the preceding six months. It would have been more satisfactory to the board had Mr. Günther entered more fully into the causes of delay, and if in his letters he had from time to time given more systematic and detailed reports of the progress of the several works. A specimen of iron pyrites has been assayed, and found to yield 4¼ ozs. of gold and 1¼ ozs. of silver to the ton. The number of hands employed is the same as at last report. The high price of cotton renders it difficult to get labour. The sanitary condition of the establishment is good. Messrs. Reynolds and Wright retire by rotation, but are eligible for re-election, and Mr. J. H. Mackenzie is recommended as a director, in place of Mr. Reynell de Castro, deceased.

The creditors of the East Dyliffe Lead and Copper Mining Company (Limited) are required to send the particulars of their claims to the liquidator by March 1, the 6th of that month having been appointed by Vice-Chancellor Stuart for adjudicating upon them.

COAL MARKET.—On Monday only 12 ships arrived. The demand for house coals was brisk, and the whole cleared off at an advance of from 1s. to 2s. per ton on last day's prices. Hartley's and manufacturers' without alteration.—On Wednesday there were 17 arrivals. The few cargoes of house coal found ready buyers at a further advance of 1s. per ton. Hartley's and manufacturers' were in increased demand, and rose 6d. per ton. —On Friday the 29 arrivals were nearly all steamers. House coals fully supported the prices of Wednesday, but Hartley's receded 6d. per ton. Hetton Wallsend, 23s.; South Hetton Wallsend, 23s.; Braddyll's Wallsend, 22s. 6d.; Hetton Lyon's Wallsend, 22s.; West Hartley, 14s. 9d. per ton. Unsold, *nil:* 240 ships at sea.

LONDON COAL TRADE.—For the first month of the present year the various railways having access to London entered at the Coal Exchange 254,295 tons 1 cwt., which tonnage is largely in excess of that for the corresponding month of 1864. Of this large quantity, 104,468 tons 4 cwts. are entered as brought from various coal fields by the London and North-Western, 98,233 tons per the Great Northern, 21,290 tons per the Great Western, 13,745 tons 12 cwts. per the Midland,—11,607 tons 7 cwts. to St. Pancras depôt, and 2138 tons 5 cwts. to King's-cross Station; 13,648 tons 19 cwts. per the Great Eastern, 1594 tons per the South-Western, 1279 tons 5 cwts. per the Chatham and Dover, and 36 tons per the London, Tilbury, and Southend.

GOLD MINING IN CALIFORNIA.—For some time past considerable interest has been felt in the gold mines of Nevada Territory, owing to the extraordinary success which has been achieved by the Californians who have been engaged in working them. Thus, the Empire Mill and Mine at Gold Hill has realised as dividend upwards of $300,000, although not a dollar has been subscribed by the adventurers, the whole of the plant and machinery having been paid for out of produce. A series of papers is now in course of preparation (the publication of which will shortly be commenced in the *Mining Journal*) by Mr. J. T. P. Pechey, of Virginia City, formerly secretary of the Lagunazo Company, from which an intimate knowledge of the prospects of "mining and milling" in that favoured district may be readily obtained.

TRADE WITH SPAIN.—We gave some details last week showing the exports of British iron and coal to Spain. The imports from Spain into the United Kingdom are also of some importance. Thus we received from Spain in 1859, 5824 tons of copper ore, of the value of 59,541*l.*; in 1860, 4658 tons, of the value of 43,304*l.*; in 1861, 3457 tons, of the value of 43,545*l.*; in 1862, 4939 tons, of the value of 55,798*l.*; and in 1863, 8685 tons, of the value of 64,764*l.* The value will be seen to have been greatly reduced in proportion in 1863 as compared with 1859. The imports of unwrought and partly wrought copper amounted in 1859 to 447 tons, of the value of 45,882*l.*; in 1860 to 496 tons, of the value of 48,194*l.*; in 1861 to 813 tons, of the value of 71,125*l.*; in 1862 to 1100 tons, of the value of 95,752*l.*; and in 1863 to 1237 tons, of the value of 107,942*l.* The imports of iron ore in the five years will be seen to have been considerable, and are increasing:—

Year.	Quantity.	Value.
1859 ..... Tons	25,701	£19,373
1860	20,542	13,865
1861	22,208	17,423
1862	33,517	24,797
1863	38,388	26,097

There appears also to be a large and extending demand for Spanish lead, pig and sheet. Thus—

	Quantity.	Value.
1859 ..... Tons	19,588	£417,389
1860	17,737	374,497
1861	19,488	370,630
1862	20,853	405,628
1863	23,347	456,453

Another large article of import from Spain is manganese ore, of which there were received 12,746 tons, of the value of 58,749*l.* in 1859, while in 1860 the receipts were 11,369 tons, of the value of 44,059*l.*; in 1861, 11,602 tons, of the value of 43,317*l.*; in 1862, 11,348 tons, of the value of 36,219*l.*; and in 1863, 18,060 tons, of the value of 63,211*l.* The value of this ore will be observed to have considerably declined in 1863 as compared with 1859. The imports of iron or copper pyrites were not officially distinguished till 1861; in that year they amounted to 38,813 tons, of the value of 114,103*l.*; in 1862, to 33,717 tons, of the value of 83,736*l.*; and in 1863 to 33,213 tons, of the value of 86,525*l.* The imports of mercury were as follows in the five years:—

	Quantity.	Value.
1859 ..... Pounds	2,882,723	£268,973
1860	2,958,651	271,209
1861	1,725,193	156,347
1862	927,549	84,059
1863	1,591,441	144,325

Finally, we may note that, in 1859, 14 tons of silver ore, of the value of 400*l.*, were imported from Spain. In 1860 the import ceased, but in 1861 it amounted to 20 tons, of the value of 600*l.*; in 1862 to 720 tons, of the value of 25,500*l.*; and in 1863 to 974 tons, of the value of 45,350*l.*

ANCIENT METALLURGY.—In a paper addressed to the Academy of Sciences, Mr. Terreil gives an analysis of a piece of bronze and a piece of iron ore, bearing traces of having been cut by human hands, both specimens forming part of the various objects found in the ossiferous caverns of the Dordogne, by Messrs. Lartet and Christie, and consequently affording conclusive proof of the high antiquity of metallurgy. The piece of bronze has the appearance of having dropped out of a crucible while in a state of fusion, and it is composed of 86 parts of copper, 12 of tin, 1 of lead, half a part of zinc, and traces of iron. The crust with which the surface of this metal is covered contains, besides particles of the above-mentioned metals, a certain proportion of lime, chlorine, carbonic acid, and micaceous clay. The piece of iron ore is a compound of 50 parts of peroxide of iron, 34 of silex and micaceous clay, and 11 of alumina.

DUBLIN INTERNATIONAL EXHIBITION.—The allotments of space to exhibitors in the United Kingdom have been issued; but, owing to the space demanded being seven times in excess of the whole quantity at the disposal of the Executive Committee, it has been necessary to refuse many applicants and considerably reduce the demands of others. The Corporation of the City of London, the National Gallery, the Royal Academy, and numerous private individuals, lend pictures for exhibition. There will be a very fine display of furniture, most of the principal London makers exhibiting. Glass and china will also be well represented. Nottingham and other manufacturing towns will make a collective display. The British colonies will be creditably represented. Nova Scotia will have an admirable collection, the Legislature having voted a large sum for the purpose. Canada and some of the other North American colonies will also be represented; and Natal and Mauritius intend to exhibit. The foreign contributions will be varied and attractive. The Emperor of the French has promised to send Sevres china and other objects. Krupp, of Essen, will exhibit steel ordnance. A very fine collection of textiles is promised from Rhenish Prussia; lamps and bronzes from Stobwasser, of Berlin; pianos from Zarich, and other manufactures from Switzerland, as well as a good collection from Russia.

PATENT RIGHTS AND INDUSTRIAL EXHIBITIONS.—On Wednesday evening Mr. Webster, Q.C., F.R.S., read a paper at the Society of Arts "On the Claims to Protection of Inventors and Authors of Designs first published at Industrial Exhibitions," in which, after stating very clearly that if protection for inventions be a good thing, of which he affirmed there was ample proof, it could not be doubted that both in the interest of inventors, especially those of the poorer class of the exhibitions, especially the workingmen's exhibitions, provisional protection ought to be accorded to new inventions and designs exhibited thereat free of charge. Mr. Campin stated he coincided in Mr. Webster's views, and directed attention to the fact that if, as had been the case, some of the exhibitors at these exhibitions directed their minds to the production of original paintings, drawings, or photographs, they would, under the Art Copyright Act, have protection for 42 years for a fee of *one shilling*, whereas, if they turned their attention to mechanical or chemical pursuits, and originated any novelties in those departments, they would have to take out patents, and pay 25*l.*, 50*l.*, and 100*l.* He considered that as this was the case, it would only be leading the poor inventor into a snare, unless the Patent Law were amended, as well as provisional protection given to things exhibited at these industrial expositions. An animated discussion then took place on the general question of the policy of granting protection or patents in any case, whether for exhibitions or otherwise, in which Mr. Bramwell, C.E., Mr. W. Hawes, and other gentlemen took part.

MINE ACCIDENT.—At East Wheal Grylls, C. B. Toll was killed by the falling away of footway and stull. Verdict—"Accidental Death."

WANTED, TWENTY-FIVE SHARES in WHEAL CURTIS MINE, for cash on receipt of transfer.—Apply, stating lowest price, to Mr. C. CARKEEK, sharebroker, Camborne, Cornwall. 38

THOMAS HAMILTON (late of Truro), STOCK AND SHAREDEALER, No. 1, CROWN COURT, THREADNEEDLE STREET, LONDON (Member of the Mining Exchange). 39
Bankers: The Alliance Bank.

MR. H. WADDINGTON, SHAREDEALER, 77, OLD BROAD STREET, LONDON, E.C.
Mining and other shares dealt in at the closest prices.
Clifford Amalgamated, Great North Downs, East Lovell, and Wheal Uny are strongly recommended; the latter mine will sell 80 tons of tin for the quarter, and promises to be one of the greatest mines in Cornwall. The shares from being 9 to 10 have fallen to 2¼, and are now the cheapest in the market, and safe for a rise on investment. Speculators with money may now make cent. per cent. profit within a short time. 40

MR. E. GOMPERS, MINING OFFICES, 3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C. 41
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent. Bankers: London and Westminster Bank.

MR. J. P. ENDEAN, STOCK AND SHAREBROKER, 1, CROWN COURT, OLD BROAD STREET LONDON, E.C.
Having had 25 years' experience in the mining districts of Devon and Cornwall, and three in the London market, with daily information of important changes from qualified agents, also the most authentic reports relating to other investments, he is in a position to afford the earliest information to his clients, and to direct capitalists whether to buy or sell in mines, railways, or other securities.
Investors should apply to him for reliable information relative to the Chiverton Mines, also the Camborne and Illogan districts. 42
A carefully selected list of sound progressive and dividend shares (certain to give a large percentage immediately) forwarded on receipt of 5s. in stamps.
Orders and telegrams receive immediate attention.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C. 43
SHARES in MINES BOUGHT and SOLD on commission, at 1¼ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon. 44
MINES INSPECTED and faithfully REPORTED ON. DEALER in MINING, RAILWAY, and OTHER SHARES.
His monthly Circular forwarded on receipt of six postage stamps.
Wellington Chambers, 75, Cannon-street West, London, E.C.

NORTH OF ENGLAND MINING AND ENGINEERING OFFICES, MANCHESTER.
MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Progressive Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall. 45
Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.
The Circular for February will contain special reports on South Wheal Crofty, North Crofty, East Caradon, and Great North Laxey.
Bankers: National Provincial, Manchester; and the Alliance, Lothbury, London.

CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN, via SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES to SURVEY and REPORT UPON ANY MINE. 46

CAPT. CHARLES WILLIAMS begs to inform all parties connected with mining that he is now in a position to UNDERTAKE CONTRACTS for the ERECTION of ALL KINDS of MACHINERY, LEVELLING or MAKING WATER COURSES and RESERVOIRS. Also, for TUNNELLING and SINKING ANY QUANTITY of GROUND, having always ready a sufficient number of machinists and miners to complete any work he may undertake, with punctuality and dispatch. References given if required. 47
Tyn-y-Wern, Taliesin, via Shrewsbury, January 16, 1865.

TO INVENTORS AND PATENTEES.—A GENTLEMAN having an extensive connection with manufacturers, merchants, and others, would be GLAD to UNDERTAKE the SALE of INVENTIONS or PATENTED ARTICLES, on commission.—Apply to Mr. RAWLE, patent office, 14, Clare-street, Bristol. 48
N.B.—Continental and foreign agencies solicited.

SILVER-LEAD ORE.

Mines.	Tons.	Price per ton.	Purchasers.
Feb. 13—Treweatha	19¼	£22 14 0	Stock & Co.
Feb. 16—Bronfloyd United.....	50	14 15 0	ditto

LEAD ORES.

Date. Mines.	Tons.	Price per ton.	Purchasers.
Feb. 9—Newtownards	30	13 3 0	Sims, Willyams, & Co.
Feb. 11—Isle of Man Mining Co. ..	100	15 6 6	Walker, Parker, & Co.
—Wheal Exmouth	15	11 12 6	Falmouth Co.
Feb. 13—Frongoch	60	13 0 0	Burry Port Co.
—Cefn Brwyno.....	40	12 14 6	ditto
—East Darren	75	15 16 0	Stock & Co.
—Cwm Erfin.....	25	17 9 6	J. & J. Williams.
— ditto	40	17 6 0	Panther Co.
Feb. 14—Dyliffe	58	13 13 6	Walker, Parker, & Co.
— ditto	48	13 11 6	ditto
—Roman Gravels.....	26	13 3 6	ditto
—Caseonroy	11	14 13 6	ditto

BLACK TIN.

Date. Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Feb. 14—Gt. Wh. Vor Utd..	67 9 3 9 ..	—	£3999 14 2—	—

COPPER ORES.

Date. Mines.	Tons.	Price per ton.	Purchasers.
Feb. 15—Great Laxey	180	£6 1 6	St. Helen's Co.

COPPER ORES.

NO SALE on Thursday last, February 16.

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and parcels.—Devon Great Consols 2030—Marke Valley 469—East Carsdon 438—Devon and Cornwall 410—Okel Tor 311—Brookwood 204—Bedford United 188—Wheal Crebor 124—Yarner 118—New Cornish 106—Wheal Friendship 102—Kelly Bray 90—Gunnislake (Clitters) 87—North Robert 72—Sortridge Consols 31—Hawkmoor 21.—Total, 4801 tons.

Copper ores for sale on Thursday week, at Tabb's Hotel, Redruth.—Mines and parcels:—Clifford Amalgamated 583—South Caradon 511—Phœnix Mines 409—Hallenbeagle 333—Great Wheal Busy 314—West Wheal Damsel 300—Craddock Moor 273—Fowey Consols 260—Wheal Rose 187—Great North Downs 177—Glasgow Caradon 130—East Downs 40—North Grambler 30—Wheal Falmouth and Sperries 20—Wheal Kitty 18—Grambler and St. Aubyn 13—Wheal Sparrow 7.—Total, 3605 tons.

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.,
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

THE NEW CRAIG DDU SLATE COMPANY (LIMITED).

Registered under the Companies Act, 1862.
Capital £50,000, in 10,000 shares of £5 each. Deposit on application 10s., and 10s. on allotment.
No call to exceed 10s. per share, and at an interval of not less than three months between each call.
SECRETARY—Edward King, Esq.
OFFICES,—No. 22a, AUSTINFRIARS, OLD BROAD STREET, LONDON.

Only 4000 shares remain to be subscribed for. Prospectuses and every information an be obtained at the offices of the company.

THE FURSDON MINING COMPANY (LIMITED)

Original capital £7500, in 5000 shares of £1 10 each.
Second issue, 5000 shares of £1 10 each.
DIRECTORS.
LUCIUS H. FITZGERALD, Esq., 22, St. John's Wood-road, N.W.
CHARLES R. HOARE, Esq., 21, Old-square, Lincoln's Inn, W.C.
WALTER L. ROGERS, Esq., 39, Montague-square, W.
CHARLES FURSDON, Esq., Howden, Tiverton, Devon.
SOLICITOR—E. L. Hooper, Esq., 37, Southampton-buildings, Chancery-lane.
BANKERS—Messrs. Puget and Bainbridge, St, Paul's Churchyard.
SECRETARY—Mr. Jehu Hitchins, St. Michael's House, St. Michael's-alley, Cornhill.

PROSPECTUS.

The Fursdon Mine is situated on the borders of Dartmoor, at the village of South Zeal, on the Exeter and Okehampton road. It is held on a lease of 21 years, from June, 1860, with free water-power sufficient for all purposes, at a royalty of 1-15th. It has machinery in good working order, and ample for many years to come.

During the four years that it has been worked by the present company the Fursdon Mine has produced £6000 worth of copper ore, for the monthly sales of which during the past year see the MINING JOURNAL. But having been originally begun as a private adventure its capital has been found insufficient, and the lowest level driven is only 21 fms. below the adit. The lode here is now being worked, and according to the last accounts is worth £15 per fm.

The directors have had the mine inspected from time to time by Capt. Z. Williams and Mr. Jehu Hitchins, who are satisfied with the soundness of the undertaking, and strongly urge the vigorous prosecution of the works.

Encouraged by such high authority as this, and the favourable results already obtained, the directors have determined to make the undertaking public, as a mining investment of unexceptionable character, and more than ordinary promise.

At a special general meeting convened for the purpose the number of shares was doubled, but directors believe, according to the best estimate they have been able to obtain, that not more than one-third of the second issue will be required, as they are raising 35 tons of ore (averaging £4 to £5 a ton) per month. About one-quarter of this amount has already been allotted to, or applied for, by present shareholders, and as soon as a sufficient number has been subscribed for the works will be pushed on with rapidity, and the opening of fresh levels, which, now that the position of the lodes is known, can be done without delay or speculation, will render the issue of more shares unnecessary.

Further information may be obtained, and copies of last reports, balance sheet, &c., seen at the offices of the company, St. Michael's House, Cornhill.

Applications for shares can be made to the secretary or any of the directors.

April 20.—Having inspected this property both at surface and underground, as also obtained from the agent there such information as I required, and heard his suggestions, a very few observations will suffice to show my opinion of the adventure. The appearances of the lodes and various cross-courses seen above, and the ramified drivings and workings below, at the adit, 11 fm. and 21 fm. levels, make it difficult, and almost impossible, to state how many lodes there are, or their direct run, underlie, or continuance, in direction and depth with any degree of correctness. These are laid down in a ground plan, but are so complicated, and appear so confused, that it affords but little clue to their disentanglement. I, however, gather there from a tendency to order of direction, the general run being like most of the productive lodes of this part of Devon—viz., north of west and south of east, and my belief is that, both in depth and extent, greater regularity will be found. The lode at the 21 fm. level, to the east, between the two cross-courses, has proved productive, and the deposits in the wide workings, at the adit level, and Barratt's stopes, also yielded good quantities of ore. The lode in the middle drivings, near the engine-shaft, at the 11 fm. level, was productive, and is still more so at and near the junction of two lodes at 25 to 30 fathoms west of shaft; and further on the tributers, in driving south, met the very promising and productive lode they are now working and raising so much ore from. At present the lode is 12 ft. wide, having a mixture of arsenical mundic (instead of, as heretofore, the sulphurous, which is a promising change), and copper ore, to the extent of about 5 tons per cubic fm., or 10 tons for the whole width, best in bottom, and from this place alone I have no doubt of getting a still greater quantity. From this, and what I elsewhere saw and gathered, I believe the disposition of this ground is productive, and I am so favourably impressed with its prospects and indications, that I augur success to future workings. To this end I recommend both sinking deeper and extending the levels, both at the present depth and below, when practicable, as well as proper cross-cuts; but the order in which these are to be carried out requires further consideration. I would here state that many of the drivings made, and other work done, if properly planned, might have laid open the ground more efficiently. However, the 11 fm. level should be extended east without delay, and the 21 fm. level from the winze driven west, under the new lode at the level above. This sett is extensive, and is situated at the parish of South Tawton, on the borders of Dartmoor, at the village of South Zeal, on the Exeter and Okehampton road. The lease is granted on liberal terms, and renewable, with water-power free of rent. There are also the necessary buildings, comprising account-house, smiths' and carpenters' shops, and enclosed timber yard and stores, dressing-floors, also enclosed with walls. The machinery consists of an engine-wheel 50 ft. in diameter and 4 ft. in breast, with pumps, rods, &c., winding apparatus and chain, also a 35 ft. diameter and 4 ft. in breast crusher-wheel with its attachments, all sufficient to work the mine for years to come, besides which there is the additional advantage of the work already done, both as to time and outlay. Looking at the state and prospects of this sett, its geological position near the junction of the granite and killas, with intersecting cross-courses, capital sufficient to fully develope its lodes to a proper depth and extent should be provided, and the workings at once commenced; and during the progress of the necessary trials, if the ore continues as I expect it will, the profit from the tributers will defray a good portion of the outlay, which, with good management and fair economy, will be moderate. Upon a review of the foregoing, I am disposed to regard this adventure as possessing elements of successful mining enterprise of no ordinary promise, and as such I can recommend it to those seeking a good speculation. JEHU HITCHINS.

FORM OF APPLICATION FOR SHARES.
(To be retained by the Directors or Secretary.)
To the Directors of the Fursdon Mining Company (Limited).

GENTLEMEN,—I beg to enclose the sum of , being the deposit of 10s. per share on shares of the new issue of shares in the above company. I hereby request that you will allot me that number, and I agree to become a member of the company in respect of such shares, or in respect of any less number that you may allot me, and to execute the Articles of Association when required; and I request that my name may be placed on the register of members for the shares so allotted.

Name in full.....
Residence .....
Date ..... Profession or business .....

MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY.

In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

THE OLD GUNNISLAKE MINING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862.
Capital £45,000, in 9000 shares of £5 each, of which 4000 only remain for allotment.
5s. per share to be paid on application, and £1 per share on allotment.
Future calls of 5s. per share will be made if required, of which at least two months' notice will be given.
DIRECTORS.
RICHARD SOMERS GARD, Esq., M.P., Rougemont, Exeter, and 7, Dean's-yard, Westminster.
Col. R. M. BEACH HICKS, 1, Southwick-crescent, Hyde Park, London.
CHARLES BURN, Esq., C.E., Little Fife House, Whitehall.
PIERCE POWER, Esq., 78, Fenchurch-street, London, and Morrison's Quay, Cork.
T. CHARLES GILL, Esq., Manager of the Tavistock Ironworks and Steel Ordnance Company (Limited), Tavistock, Devon.
BENJAMIN COBB, Esq. (Messrs. B. Cobb and Co.), 34, Fenchurch-street, London.
CONSULTING ENGINEER AND SECRETARY—Mr. Jehu Hitchins, St. Michael's House, Cornhill.
LOCAL ENGINEER—Mr. John Hocking, jun.
BANKERS—Metropolitan and Provincial Bank, Cornhill; Messrs. Gill, Sons, and Co., Tavistock.
SOLICITORS—Messrs. Courtenay and Croome, 9, Gracechurch-street, London; Messrs. C. V. Bridgman and Son, Tavistock, Devon.
AUDITOR—Mr. Maurice Thomas, 24, Basinghall-street, E.C.
OFFICES,—ST. MICHAEL'S HOUSE, CORNHILL, E.C.

Applications for shares to be made to Messrs. WATSON and CUELL, St. Michael's-alley, Cornhill; to the local bankers; or to the secretary, St. Michael's House, Cornhill, where prospectuses and detailed reports of the most favourable character, by Mr. Jehu Hitchins, Mr. Nicholas Ennor, and other unquestionable authorities, can be had, post free, on application.

THE OLD GUNNISLAKE MINING COMPANY (LIMITED).

ALL APPLICATIONS FOR SHARES must be SENT IN on or before TUESDAY, the 21st inst., for LONDON, and WEDNESDAY, the 22d inst., for the COUNTRY, when the allotment will be proceeded with strictly in order of dates.

THE CWMRICKET LEAD MINING COMPANY

Capital £6000, divided into 6000 shares of £1 each.
Deposit, 2s. 6d. per share on application.
To be conducted on the Cost-book Principle, until the whole shares are taken up, when there shall be a general meeting called, and, if thought desirable by the majority of shareholders, to be registered under the Joint-Stock Companies Acts, to secure limited liability.
COMMITTEE OF MANAGEMENT.
(With power to add to their number.)
DAVID SNEAD, Esq., Llanidloes.
RICHARD MORGAN, Esq., Llanidloes.
Capt. MORRIS RIDGE, Llanidloes.
BANKERS—The North and South Wales Bank, Llanidloes.
SOLICITOR—J. Williams, Esq., Llanidloes.
SECRETARY—Mr. John Morgan, Angel Inn, Llanidloes.
CAPTAIN AT THE MINE (pro tem.)—Matthew M. Ridge.

The object of this company is to extend the working of the Cwmricket Mines, in the parish of Llangurig, Montgomeryshire, and to explore the various lodes existing in the sett. The sett is held under license for the term of three years, dated the 11th day of October, 1864, and is held under license from Margaret Marsh, Lady, of Carno, Montgomeryshire, North Wales, at £1 per ton royalty dues, equal to about 1-15th royalty, with full liberty, power, and authority to call for a lease for the term of 21 years when required.

The mine is situated within about seven miles of the improving town of Llanidloes.

It is believed that various other lodes exist in the sett, which are likely to prove as rich for lead ore as the lode already worked upon.

The mine has been carefully examined by several good and practical mine agents, who have reported upon it in the most favourable terms.

This mine, being situate in a well-known mineral district, where lead abounds in large quantities, offers to the shareholders every guarantee of a safe and remunerative investment.

The company will be formed in 6000 shares, of £1 per share, to be conducted on the Cost-book Principle, 1000 shares to be held free of call by the promoters for work done and discoveries of lead made, and £50 in cash paid for the plant on the mine, at the first general meeting of shareholders, leaving 5000 shares to be paid upon.

Application for shares to be made to DAVID SNEAD, Esq., Llanidloes; or to the secretary of the company, Mr. JOHN MORGAN, Llanidloes. As there is only a limited number of shares to be disposed of, an early application will be necessary.

REPORT.

Capt. S. MORRIS RIDGE's (the late agent) report.

Jan. 7, 1865.—Agreeably with your request, I beg to furnish you with a short report of the Cwmricket Mine, Montgomeryshire, having the confidence in my own mind that you have obtained the grant of a most valuable piece of ground, which there is but little doubt upon my mind will be found rich and productive for lead ore of a rich quality. The former company's workings were chiefly confined to the driving of an adit level for about 30 fms. in length in a southerly direction, and two lodes were intersected, which we found productive for lead ore. But little or nothing was done in No. 1 lode to prove its value, but No. 2 lode was driven upon for about 9 fms. 3 ft., where the lode was productive for lead ore for the whole length of the driving, but in my view it is too shallow to bear lead in large quantities at this depth, it not being more than 6 fathoms of backs; consequently we suspended this and commenced to sink a new shaft to the north-east side of some old Roman works, and sunk it down to the depth of 7 fms. 4 ft.; but the water came quick and overpowered us, therefore we commenced to cut a wheel-pit to erect a wheel, and intended to sink it under a lift. We also cleared up the old Roman works to the bottoms, which are not more than 6 fms. 3 ft. deep, where I am glad to inform you there is a good rib of lead. We did this two days previous to the stopping of the mine by the late company, and as far as we cleared up the bottoms I consider the lode will produce from 12 to 15 cwts. of lead ore per fm. It was intended by me to have cleared up the whole of the Roman works, and to develope the mine in due course, but owing to the difficulties the company were in, in consequence of the Snowbrook Silver-Lead Mine not turning out according to their expectations, the funds were not sent down to discharge the labour cost and merchants' bills, and the works were abandoned. Impressed as I was with the value of the undertaking, and as well as the opinion of other intelligent miners and agents, I recommend it to you with the view of your forming a new company to work the mine effectually. What I shall now recommend and advise to your notice is at once to commence sinking a new shaft about 6 fms. to the north side of the old Roman works, and to sink it down 15 fms. and then drive out south; and in about 2 fms. 3 ft. driving the lode will be intersected, which will then drain the old Roman works, which will enable you to at once commence raising lead by sinking and stoping, and will give you 9 fms. of whole ground to work away below the old Roman works to the 15 fm. level. Also, when the lode is intersected in the 15 fathom level I would advise you to drive out upon its course, especially to the south-east side of your shaft, when I have no doubt you will be able to make handsome returns of lead of a good quality. I would advise this shaft to be sunk about 8 ft. long by 5 ft. wide, and I consider the first 10 fms. can be sunk for about £5 10s. per fm. I would also advise you to erect the small wheel you are about to, about 15 fathoms to the west of the shaft, for pumping and winding purposes, when you will require but a short line of rods, and the stone from the sinking of the shaft will answer to build the wheel-pit and save expense of hauling. I also consider the buildings and plant upon the mine quite sufficient at present for the prosecution of the works, except the wheel you are about to erect, and some sheds for dressing purposes, all of which will be required in a short time. I consider what I have recommended to your notice the best and most economical way you can go to work to make quick returns at a small outlay. Any further information you may require I shall be happy to give respecting this property. I wish you every success in the enterprise. S. MORRIS RIDGE.

THE VAL ANTIGORIA GOLD MINING COMPANY (LIMITED).

Incorporated under the Companies Act of 1862, with limited liability.
Capital £60,000, in 30,000 shares of £2 each.
Deposit on application 5s. per share, and 5s. on allotment.
DIRECTORS.
JOHN ADDIS, Freeman's Wharf, Southwark.
JOHN FISHER, 60, St. James's-street.
JAMES FUSSELL, G.C., 16, Cadogan-place
J. F. QUIN, 111, Mount-street.
THOMAS STAUNTON, 11, Porchester-square.
} Directors of the Vallanzasca Gold Mining Company.
(With power with the vendors to appoint two more.)
BANKERS—The Agra and Masterman's Bank (Limited), 35, Nicholas-lane, E.C.
BROKERS—Messrs. Hill, Fawcett, and Hill, 29, Threadneedle-street, E.C.
MANAGER AND MINING ENGINEER—Chevalier Francfort, F.G.S., Pallanza.
SECRETARY—J. C. Goodman, Esq.
OFFICES,—9a, GREAT ST. HELEN'S, LONDON, E.C.

The Vallanzasca Gold Mining Company (Limited) would have been glad to incorporate with that company the mine now about to be purchased, had all the circumstances permitted. Such not being the case, it has been determined to form a separate company, to purchase and work the Crodo Mine, situated in the Val Antigoria, in the province of Domo d'Ossola, Italy.

The property is held under the existing mining laws of Italy, and the royal concession will be registered in the name of the company, whose freehold it will become, subject only to the ordinary taxes, and a royalty of 1-10th of the nett profit. A good road leads to the mine. The Alfenza, a large and permanent stream, runs close to it, and can be made to furnish all the water power required for working the necessary machinery.

The mine was worked for a few months each year during the last century by the Testoni family, and the original registers show a continuous and large production of the purest gold, notwithstanding the workings were of the rudest character, with the most simple appliances.

The workings were suspended by the influx of water, and the mine remained in that state till the present vendors recommenced operations in 1863. They succeeded in draining the mine, and reached the bottom of the ancient workings, which were found to be only 15 fms. under the adit. The ore broken from the main lode is rich in gold, producing 1 to 2¼ ozs. per ton. All these statements have been fully verified on the spot, as appears by the reports of eminent practical mining engineers, who affirm that it only requires the necessary machinery to render the mine immediately productive.

The directors have given all the circumstances their most careful consideration, and acting on their experience in the Vallanzasca Company they believe that 15s. to £1 per share will be ample to complete the purchase, procure the necessary machinery, and accomplish everything needed to render the mine remunerative in the highest degree.

The terms of purchase are 10,000 paid-up shares, to rank as to dividends with the amounts paid from time to time on the other shares, and a cash payment of £7500.

12,500 shares have been already subscribed and the deposits paid thereon. Prospectuses and forms of application for the remaining 7500 shares may be obtained at the offices of the company, and of Messrs. HILL, FAWCETT, and HILL, 29, Threadneedle-street, the brokers.

A deposit of 5s. upon each share applied for must be paid to the company's bankers previously to the application being sent in; this sum will be returned if no allotment is made to the applicant. No application will be received after Friday, the 17th inst.

London, February 13, 1865.

GEOLOGY and its ALLIED SCIENCES ELABORATELY

WORKED OUT. 1000 specimens packed for £10.
DEINOEUPHODON CALVERTII (MENKE).—Section of the tusk of this new and interesting fossil, accompanied by a description and plate of the lower jaw, £1 10s.
SOWERBY, 164a, STRAND. ESTABLISHED 54 YEARS.

Notices to Correspondents.

BLAST-FURNACES IN THE NORTH OF ENGLAND.—I shall feel obliged to any reader who will kindly furnish me through the Journal with the size of the Blast-Furnaces generally in use in the North of England, where hematite ore is chiefly used. I shall be glad to know the height of such furnaces from the hearth-stone to the charging-plate on top, and also the diameters at the hearth, boshes, and top.—SILEX.

MINERAL INDICATIONS.—If "G. M. S." (Limerick) will send us particulars respecting the sulphur ore he alludes to in the Journal of Jan. 4, we will forward them to a party who will be likely to give him valuable information on the subject.

KIT HILL.—Can any reader inform me through the Journal what is doing or intended to be done at this mine; and also whose fault it was that the late breakage occurred, which, to all appearances, caused operations to be suspended? I believe there is nothing wanted to make this a valuable and dividend-paying property, save a little money to put things right for starting again, and a change in the management—the last of which I consider should be done, or I would advise all the legitimate shareholders to hesitate in continuing their confidence until they can get their mine managed by a practical miner, which I cannot think has been the case hitherto.—TIN.

WHEAL EDWARD.—I noticed in Capt. G. Rowe's report of last week on the above mine the following sentence:—"The carbonic gas is pouring forth through the fissures of the lode very strong, which indicates something of importance ahead." Now, Sir, I have no doubt but Capt. Rowe has studied chemistry, or he would not have been able to ascertain whether it was carbonic or any other gas that was at the time pouring forth. I am sure Captain Rowe will esteem it a privilege to inform the mining community through your valuable Journal how he was enabled, or the means he employed, to have ascertained it to have been carbonic gas; and also whether he discovered it in a solid or fluid state? It unfortunately happened that Capt. Rowe did not mention in his report what such a pouring forth of carbonic gas was indicative of; will he, therefore, be kind enough to say what?—MINER: *Gunnislake, Feb.* 15.

WHEAL LEWIS.—In reply to the enquiry of your correspondent about the proceeds of sales of materials, &c., in this mine, I can only say the money has been all collected for the materials, and nearly all the calls, with the exception of one or two defaulters with whom prompt measures will be taken to recover the amounts. The balance is in the bank in the name of the winding-up committee, who are ready to distribute it to those shareholders who have paid up all their calls. The only obstacle to its being at once divided is a claim made by the lords for land destroyed, that would swallow the whole of it. This claim the committee consider ought not to be made on them, as the land was destroyed by a former company, and not in the working by the last adventurers.—JOHN LITTLE, late Purser of Wheal Lewis.

WHEAL CURTIS.—I shall be glad if any local shareholder could inform me if it is true that the engine-shaft has not been sunk for the past month? If so, what has been the cause of the delay, and has the lode been cut in the 40 fathom level cross-cut yet, which was to have been done a month since?—AN OUTSIDER.

NORTH TRESKERBY AND WHEAL GRYLLS.—"A Subscriber" (London).—The credit balance of 54*l.* 9s. 4d., as stated last week, was correct. The 105*l.* 9s. 8d. which "A Subscriber" regards as the balance was to the end of October; in November and December the loss was 51*l.* 0s. 4d., leaving 54*l.* 9s. 4d. still in hand. The two other mines referred to are West Grylls and Wheal Grylls respectively; West Grylls is in 600 shares, 4s. paid, and Wheal Grylls, in 1024 shares, 7*l.* 4s. paid. "A Subscriber" should have signed his letter.

CEFN CILCEN.—This mine for some reason or other has of late been much neglected by mining speculators; not so much, it is presumed, on account of the quantity of lead returned, as in consequence of the manner in which the mine has been managed. The public will, no doubt, be pleased to know the management is now under the superintendence of an experienced and first-rate miner, who will soon disclose the probabilities of this extensive property. Already there is an improvement announced, and when the season of the year changes, regular returns of lead may be looked for. The sett is best situated of any in the neighbourhood; it is also large in extent, and several of the champion lodes of the district traverse its entire length. It has also the superiority of other mines, inasmuch as it can be explored to an exceeding great depth without the aid of pumping machinery.—SHAREHOLDER.

TREWEATHA.—I was not a little surprised to see in the Notices to Correspondents in last week's Journal a letter to this effect:—"How much longer are shareholders to be satisfied with weekly reports of water being out, of valuable lodes being cut again, of water getting in and stopping further working, &c.?" I am sorry to think of the mine being in such a depressed state, as I have always looked upon it as likely on day to become a good and lasting property. At present, however, I am greatly disappointed, as I have known the mine well from the commencement, and am fully satisfied if it had been worked according to the plan I suggested at one time to Capt. Rowe—but as he then stated he was not the manager, and was sorry he was not allowed to interfere with it, or to make any alteration in the system or mode of working, being only a resident agent,—and which he felt assured would be of great advantage to the mine, and of profit to the adventurers if carried out. I now allude to the Old mine, as I have not seen the New one only at surface, neither do I know the present agents, though I have no doubt they are practical men; but if the mode of working had been carried out as was then suggested, the old mine would not have been abandoned, but would have yielded ore in paying quantities, and left a profit to the shareholders. The mine is as well situated as to its geological position as any lead mine in Cornwall, and holds out every promise of success to the shareholders, as will be seen by future returns, if properly laid open.—A CORNISHMAN.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, FEBRUARY 18, 1865.

DOES COAL EXIST NEAR LONDON?

Oft as this question has been discussed in the columns of the *Mining Journal*, the difficulty of expressing a reliable opinion is as great as ever; although the success which has attended the trifling exploratory operations which have been conducted, from time to time, in Kent and Surrey has not been great, an additional evidence is now brought forward of the probable continuation of the Belgian coal field, not only as far west as the counties south of London, but even to Somersetshire. In a highly interesting paper, read by Mr. G. C. Greenwell before the Manchester Geological Society, "On the South-Eastern Portion of the Somersetshire Coal Field," so much information is given calculated to assist those who may feel inclined to renew the search for coal in the south-eastern counties, that we publish an abstract from the Society's Transactions of the paper, with three of the principal diagrams accompanying it.

Excepting the district now referred to, there are in all the English coal fields which have come under Mr. Greenwell's observation various coal seams lying parallel with each other, or nearly so; and although the rate of inclination varies greatly in one locality from what it does in another in the same coal field, yet the change is rarely sudden, the dip becoming greater or less by degrees; the change being apparently due to prolongol, and not to sudden agency. In some coal fields on the Continent the same peculiarities as in the coal field to which our attention is directed are found; and from an examination of the Belgian coal field in the neighbourhood of Mons, as well as from a tolerably intimate acquaintance with that of Somersetshire, he draws the conclusion that these coal fields belong to the same period of the formation of coal, and that these contortions, from their similarity, are attributable to the same cause. It had been previously suggested that the coal field of Liége and Mons probably extends westward to England; and if this should prove to be the case, the above similarity might indicate a belt of coal field from east to west, traversing the whole of the southern counties of England, lying between the Straits of Dover and the British Channel.

Fig. 1. Fig. 2. Fig. 3.

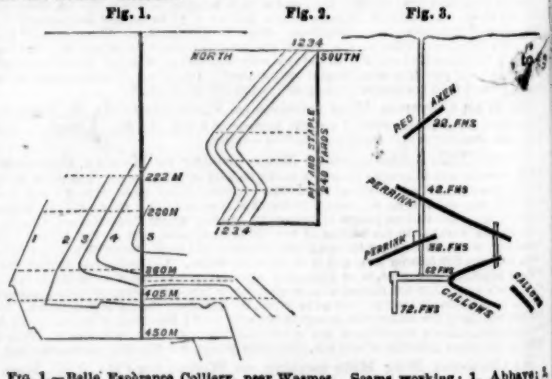

FIG. 1.—Belle Espèrance Colliery, near Wasmes. Seams working: 1, Abbaye; 2, Andrieux; 3, Fertde; 4, Veine à Forges; 5, Veine au Caillou.

FIG. 2.—SOMERSETSHIRE COAL FIELD.—Vobster Colliery, near Frome. Seams working: 1, Perrink, 3 ft.; 2, Strap, 1 ft. 4 in.; 3, Shelly, 1 ft. 4 in.; 4, Callows, 5 ft., but varying considerably. FIG. 3.—Section of Goodeaves Pit.

In the accompanying diagrams Fig. 1 is a section of the coal mines of the Belgian coal field near Wasmes, where the shaft passes through the same seams of coal twice; and Fig. 2 shows a section of a colliery situated in the district, the subject of the paper, where a shaft might pass through the same seam of coal thrice. This is not the only point of similarity between the Belgian and the Somersetshire coal fields; they both lie on the north side of belts of mountain limestone, and it is, when near to the limestone, in both cases, that the lowest seams, rising to the day from the bottom of the basins, exhibit the distortions referred to. In both localities

these seams of coal are of a similar character, being generally soft, pure, and bituminous, and infested with fire-damp. And in both localities, northward from these steep and contorted measures, are seams of coal, comparatively flat and free from fire-damp, which, although lying at a considerable depth, are yet some thousands of feet above the seams first named, which, when necessity demands, will, no doubt, be sunk to, and, in all probability, found in the greatest perfection.

With regard to the difficulty of working coal when found in this abnormal state; it will be easily seen that it is next to an impossibility to lay out works with any view to permanent arrangement; and, in many cases, the seams of coal being inverted, and the usually soft underclay becoming the roof, the expense of supporting it is very great, and keeping the coal clean and free from dirt exceedingly difficult. The distortion of the seams of coal near the Mendips cannot be better shown than by the following extract from Messrs. Buckland and Conybeare's observations on the south-western coal district of England, published in the "Transactions of the Geological Society of London," in 1824:—At Goodeaves Pit, the section of which is shown in Fig. 3 (from the bailiff, Mr. Jeffries), "the dip in general is southerly, but sometimes it becomes northerly. The beds are sometimes vertical, but never continue so above 10 fathoms. The line of bearing is north-east and south-west, as it is at Newbury. Faults are frequent, which throw up the measures on the northern side." That these distortions have been coincident with the upheaval of the mountain limestone is, Mr. Greenwell thinks, but slightly to be doubted; but if any further corroboration were required, the following fact may, probably, be considered conclusive. There is, at a place called Upper Vobster, ½ mile north of the mountain limestone proper, an outlier of limestoue, until recently supposed to be the effect of faults of very great magnitude. They are shown thus in the section accompanying the paper, but not shown here. That this explanation of the limestone being found at *a* and *b* is inaccurate, is proved by the fact of the coal having been worked *under it*. And the facts are, therefore, led to conclude that when the upheaval of the limestone took place, it was turned over, together with the coal measures, and that if any of it covered the space between *b* and *c*, it has since been removed by denudation. This portion of the coal field is now being further, and, indeed, somewhat extensively, developed; and many circumstances, which are now involved in obscurity, will, no doubt, soon be satisfactorily explained.

The general section across the country shows the oolite (inferior) lying immediately superimposed on the coal measures. This fact has been proved by the sinking of a coal pit, but what exact belt of oolite is here passed through is by no means conclusively established. The specimen taken by him from the sinking he is very much inclined to think is from the corn-brash, or forest marble, in which case we are having the upper formations of England brought into closer proximity with the coal measures than most people are aware of. In conclusion, Mr. Greenwell considers that it is, to say the least, probable that should the coal measures continue eastward from the district under notice, a circumstance which he does not as yet see any reason to doubt or think unlikely, they may be sunk to without having to pass through the formation of oolite, lias, and Red Sandstone, which in other parts of England are found of such great thickness. Far away to the south of this district, in the island of Alderney, there are strata which, if not millstone grit, are uncommonly like it, and these are beyond those upper formations which hem in our most southerly coal field, and which have always been considered to interpose an insuperable barrier to the working of coal beneath, if in existence.

In the course of the discussion which followed the reading of this paper Mr. Binney remarked that at the Bath meeting of the Association he went to Whatley, to see where Mr. Moore obtained his wonderful amount of specimens in the crevices of the limestone. In one place they there saw the mountain limestone covered up with oolite, where there are now no coal measures at all. He thought the remarks which Mr. Greenwell had made of the coal field of Somersetshire extending under the south-east of England and joining that of Belgium formed a very probable hypothesis. In the north of France they pass through the chalk into coal measures. It is singular that the strange contortions in the coal measures of Somersetshire should so much resemble those of Belgium. In sinking through them sometimes you get the same seam of coal twice over, and that is a state of things we very seldom see here. In the north-west of England the coal measures vary very much, as well as in the south. There are several thousand feet of coal measures without coal at all in the south-west of Scotland—nothing but a few fossils. We have our Ardwick limestones in the south of Scotland, and no seam of coal about them, while in this neighbourhood we have three and four seams in and under them.

The President (Mr. Andrew Knowles) enquired how Mr. Greenwell would account for the outcrops of the coal measures not having been discovered in southern counties before now? Mr. Greenwell said the working of coal had been of very ancient date in Somersetshire. The President assumed the conclusion Mr. Greenwell had arrived at was that the coal measures of Somersetshire dip down and come out again upon the Continent? Mr. Greenwell put it forward as a mere speculation. The data produced were given him by the engineer of a colliery in Belgium, and were taken from actual measurement, as traced on the working plans. The President believed that all the coal mines in Somersetshire that have been proved are of the lower mines, and none of the higher series; they are all the mountain mine series. Mr. Greenwell said they are all above the millstone grit. Mr. Binney thought there was no doubt the coal was equal to the coal got at Clifton. There is nothing to place them in our lower coal fields. Those that he saw appeared like fossil middle coals, and he himself would call the whole of the Somersetshire coal seams equivalent to their Lancashire thick coal.

PETROLEUM AS STEAM FUEL.

An invention, which it is claimed is alike applicable to the economising of fuel, whether the material burnt be liquid or solid, has recently been provisionally specified by Mr. M. P. Watt Boulton, of Tew Park, Oxfordshire, his object being generally to employ heat more economically than is done in the steam-engine as now constructed. It is well known that according to the present construction of engines and furnaces a considerable percentage of the heat generated by the combustion of the fuel is carried off by the gases discharged into the chimney. The object of Mr. Boulton's method is to save this heat, and render it efficient in working the engine. When the engine is in motion, he employs it to work a force-pump, which forces the air into the chamber, where combustion takes place, and onwards into the water contained in the boiler. The heated gases after issuing into the water are made to pass through a number of small orifices, and so to rise in numerous currents through the water, communicating heat to it in their passage, as the bubbles of steam do in rising through the water in an ordinary temperature of the atmosphere, while when it acts on the piston its temperature is much higher, there is gain of power in this part of the process. In fact, the engine is a combination of the steam-engine and the caloric engine.

It is proposed in some instances to modify the method of proceeding by generating inflammable gas (say, hydrogen or carburetted hydrogen), or inflammable vapour (such as the vapour of petroleum, naphtha, or oils), in a separate vessel, and this inflammable gas or vapour may be forced along a tube into a chamber, in which it mixes with air or any gas, forming with it a combustible mixture forced into the same chamber through another tube. In this chamber the combustible mixture of gases is ignited and forced onwards into the water contained in the boiler, rising through it in the manner previously described. When there is a sufficient supply of cold water, the heated volume of steam and gases after having performed its work on the cylinder, may be admitted into a condenser or cool chamber, where the steam will be condensed and the hot gases greatly reduced in bulk. From this chamber they will be extracted by an air-pump. The friction of the force-pump which injects air into the boiler may be utilised as a source of heat, by imparting heat to the water before it is introduced into the boiler, or where petroleum (or any similar liquid) is used by imparting heat to this. This will serve to keep the force-pump cool, which is desirable. As in this method the heat is applied to the interior of the boiler, it will be proper to protect the external surface of the boiler in such a way as to obstruct the passage of heat. The covering employed for this purpose may be made moveable, so that when desired heat may play on the outside of the boiler. There are a great number of minor details of arrangement into which he does not enter, as these may be varied in a number of ways, and do not affect the principle of the method. The heated gases instead of passing into water, may pass into a receptacle void of water, and issue thence to work the engine by their pressure. In this case the engine is solely a caloric engine. The intense heat of the gases on issuing from the combustion chamber is capable of being moderated to any required degree by forcing an additional supply of air into the receptacle. Where there is a sufficient command of cold water, the heated gases after they have performed their work in the cylinder can be admitted into a condenser or refrigerator, and extracted thence in their cooled and contracted state by an air-pump. Mr. Boulton claims that his method of employing heat is applicable not only when fuel of the ordinary nature is used, but even more so where the fuel is liquid, such as petroleum, or a gas, such as hydrogen. As much attention has recently been directed to the question of burning petroleum as a steam fuel, it would be generally gratifying to learn the success achieved by the several methods of using it that have been devised.

IMPROVEMENTS IN DRESSING ORES.—An invention has been provisionally specified by Mr. J. E. Austruy, of Paris, which consists in the construction of a washing apparatus, to separate earth, mud, and other extraneous matters from ores and other substances of a less density than water. The apparatus is composed of a fixed cast-iron tube, serving as the axis of rotation. The water for the washing enters the said tube, and reaches the apparatus through a small tube, the orifice of which is covered with a perforated sheet of iron, serving to divide the water into small streams, which can be graduated according to necessity. The moveable part of the apparatus has the form of a straight cone; its axis is so inclined that the lower generator of its basis assumes a contrary inclination. The conical envelope being made to turn, the ore or substances enter by the large basis, and the water by the small one, the several pieces of ore rolling one against the other are compelled to ascend the current of the water, and being washed get out through the smaller basis after having passed through the shower created by the small tube. The water, impregnated with the extraneous matters, runs out through the large basis. It will be easily understood that the several pieces of ore being drawn by the movement of the envelope which supports them in the plane perpendicular to the axis of rotation, are attracted by their own weight and fall in a vertical plane, and therefore after their fall they advance within the lower generator according to their previous position.

PREVENTION OF COLLIERY ACCIDENTS.

Amongst the apparatus connected with colliery operations in the International Exhibition of 1862 was an invention for the prevention of accidents in the shafts of coal mines, patented by Mr. J. T. Calow, of Staveley, and a company is now about to be formed for carrying out the invention more efficiently, and also for conducting a general business in the manufacture of cages. As the capital proposed to be raised is small, and great advantage must arise from the use of eligible premises, which may be entered upon immediately upon very reasonable terms, it is considered that the undertaking cannot fail to become a remunerative investment. With regard to the merits of the invention, its superiority over all others has been fairly and practically established, the principle having been acknowledged by the leading scientific men of the day to be based upon an unerring system, and favourably reported upon by the jurors at the Exhibition. The safety apparatus is not only the most simple and yet the most perfect in its action, but it is also the cheapest extant, and does not get out of order.

Notwithstanding the difficulties attending the introduction of all new inventions, Mr. Calow has within two years sold and fixed about twenty, which undoubtedly speaks well for the future. The great feature of the invention consists in the spring being brought into operation when the cage is moved, so that the only result of the failure of the spring is that the cage becomes fixed. As a proof of the estimation in which the invention is held, as well as a practical test of its action, the fact may be referred to that Mr. J. Marley, the head mining engineer to Messrs. Bolckow and Vaughan, made an agreement with the inventor to give one of his cages a trial, reserving to himself the right of paying or witholding payment at the end of a given time, for although the invention had been admired, no one could be found to make the first test. At the expiration of the term, the apparatus was paid for, and Mr. Marley expressed satisfaction at its action, but declined to purchase more until a practical test had taken place. Shortly afterwards a chance occurred by an accident happening to prove its utility, when it answered well, having held the cage and tub of coal, weighing together about two tons, the instant the rope broke. Messrs. Bolckow and Vaughan's Company at once bought licenses for the use of twelve cages. The cage by which the accident was prevented has been in constant work for about two years, and the machinery has not been repaired, even the same spring as at first being still employed.

PUDDLING BY MACHINERY.

After twelve years' efforts to render it of practical utility, there appears to be a probability of Messrs. Warren and Walker's rotary puddling apparatus obtaining a position amongst the ordinary machinery of an ironworks. The many and annoying difficulties which ironmasters have had to submit to, in consequence of the exorbitant demands of the puddlers, have frequently been commented upon in the columns of the *Mining Journal*, but hopes are now entertained that the iron will be converted from the ordinary pig into a material precisely similar to puddled iron of the best quality entirely by machinery. For some years the invention in question remained in comparative abeyance, owing to the difficulty of getting it thoroughly tested on the large scale; subsequently Mr. W. H. Tooth patented an almost identical apparatus, but suffered the patent to lapse through non-specification; and lately the Dowlais Iron Company have taken up the matter, and Mr. Menelaus, the manager, after various experiments and trifling modifications in the shape and supplementary apparatus, has succeeded in making the invention work admirably. The Dowlais Company are so thoroughly satisfied with his success that they have authorised the laying down of considerable works for the manufacture of iron by this process.

Although the subject was not so prominently brought before the Institute of Mechanical Engineers in Birmingham, at their recent meeting, as was intended, enough was stated to prove that the invention has really much to recommend it. So experienced an iron maker as Mr. Menelaus would not be likely to state, as he has done, that he has satisfied himself with the merits of the rotary furnace, unless the results obtainable by it were really good. There was exhibited in the room an immense bloom of iron, weighing 5 cwts., manufactured by the process, in order to show the state in which the charge is delivered, as well as finished iron produced from similar blooms. The general opinion of the practical men present was that the workmanship was superior to that usually produced by hand labour, and it seems that not only is the quality better, but that it is also produced at a lower price than by the old principle. Unless some unlooked-for evil should present itself to mar the regular working of the process, no doubt can be entertained that the rotary furnace system will become as valuable in connection with the manufacture of wrought-iron as the pneumatic process is now acknowledged to be in the production of a substitute for steel.

The rotary furnace plant at present laying down at Dowlais consists of eight furnaces, capable of turning out about 500 tons of finished iron weekly, and the whole will be ready to go to work in about a month; and Mr. Menelaus has invited the whole of the members of the Institute to be present at the inauguration, that they might judge of its value by a personal inspection of its working. The manager of the Dowlais Company was present, with the engineer, to support this invitation, and introduced the inventor of the furnace to other members of the Institute, in terms which revealed the existence of unbounded gratification that he had been the means of conferring a boon upon that branch of our national industry which embraces the iron trade.

MARKETABLE PEAT FUEL.—A mode of treating peat, so as to render it readily marketable, has been patented by Mr. William Smith, of Lower Bagot-street, Dublin. His invention relates to the mixing of peat charcoal, coal slack, culm, coke, or other combustible material with peat, either dry in a state of minute division, or wet and rendered plastic by pugging or other suitable means, and moulding the mixture into blocks of fuel. When preparing peat charcoal for the smelting of iron he reduces the charcoal to powder, and then adds to it about equal weights of well-pugged peat, which when plastic will contain from 80 to 90 per cent. of water, and blende the mixture intimately together; or he adds the pugged peat to the peat charcoal, and allows the charcoal to be reduced to powder in mixing it with the pugged peat. He then passes the compound through moulds, and submits the blocks so formed to pressure, or submits the blocks to pressure in the moulds. He then dries the blocks, and when dry they are ready for use, peat charcoal thus prepared will stand the blast and burden of a blast-furnace. In preparing fuel with the use of coal slack or culm he reduces the materials to a state of minute division, and washes them, so as to free them from impurities. When he uses dry peat he reduces it to a state of minute division, and mixes (say) from two to three parts of peat with from one to two parts of the washed coal, slack, or culm, prepared by mixing with tar in the proportion of from five to twenty gallons of tar to each ton of the said materials. By mixing tar with the said materials before adding them to the dry peat, he readily makes any description of fuel desired, as the tar is thus prevented from clotting the peat, and rendering the mixture unequal in composition or difficult of moulding. The mixture of tar assists in combining the said materials with the peat, and without its use the blocks of fuel would be very friable. The mixture of dry peat and materials so prepared he submits to pressure in moulds, and for this purpose he prefers a mould open at both ends, in which resistance is obtained by the friction of the blocks against the sides, and in which the blocks are formed continuously by a piston working into one end of the mould and fitting it accurately. The blocks of fuel thus formed are ready for use. When wet pugged peat is used he mixes it with about equal weights of the said materials, reduced to a state of minute division and washed as before mentioned (when the materials are of an anthracitic nature he mixes them with from five to twenty gallons of tar to the ton). He then passes the mixture of wet pugged peat and said materials through moulds, and thus forms blocks of fuel, which he afterwards dries either in the air or by the aid of artificial heat. In some cases he coats the blocks of fuel so formed, when dry, with tar, or a composition of tar and pitch, to protect them from the injurious action of wet. In manufacturing the said fuel he does not restrict the mixtures to the exact proportions he has mentioned, but they will generally be found the most advantageous. In places where coal is plentiful, he prefers to use wet pugged peat, and where peat is plentiful but coal scarce to use dry peat.

SPECULATIONS IN PIG-IRON WARRANTS—BROKERS' CLAIMS ON BANKRUPTS.—In the *Mining Journal* of Sept. 10 last we remarked that important legal discussions, in connection with the right of brokers to claim upon bankrupt estates for losses through speculations in pig-iron warrants, were likely to arise out of Mr. Registrar Hill's decision in the bankruptcy of Messrs. E. Barker and Son, of Birmingham; the Registrar having admitted the claim, and the assignees having expressed their intention of appealing to the Lords Justices. It will be remembered that the grounds upon which the proof was admitted were that the transactions appeared to have been *bona fide* sales and purchases, and not time bargains; but we explained that all dealings in pig-iron warrants are of the nature of time bargains, and that until within the last few years this was so openly acknowledged that, in the event of the buyer choosing to draw iron against his warrants, he could not require the delivery of the particular brands and proportions represented on those warrants, but was bound to accept any of reputed equal quality. The Registrar admitted that no debt was due to Messrs. Walduck from the bankrupts at the time of the bankruptcy; the iron bought was never delivered, nor was there any thought of delivering it, and previous payments were simply the payments of "difference" to the bankrupts, and we maintained that if "differences" upon speculative dealings were admitted as debts due from bankrupt estates, it was difficult to understand why public companies should not prove against bankrupt shareholders for the amounts uncalled upon all shares which they have subscribed for. How far our opinion was justified may by judged of by the fact that the appeal has now been heard, and that the Lord Chancellor has decided that the claim was not provable under the 178th section of the Act of 1849 (that under which it was admitted in the Court below), nor under the 153d section of the Act of 1861. The Commissioner's order, therefore, was reversed, and the proof expunged.

REPORT FROM NORTHUMBERLAND AND DURHAM.

FEB. 16.—The Coal and other trades are going forward most prosperously, the demand for all the staples of the district being very active. We noticed some time ago that the question of good workable seams of coal below the seam which has hitherto been the Rubicon, under which it was not considered prudent to venture—that is, the Low Main—was to be tested by actual trial, and this trial is going on at present. At the Felling Colliery, near Gateshead, a sinking is in progress from the Hutton seam, or Low Main, downwards, which, it is stated, is to be continued down to the depth of 100 fathoms below the said seam. It is expected that a good seam or seams will be met with in this sinking, and if so, the result will not only materially increase the value and improve the prospects of the colliery where the trial is in progress, but it will also have an important bearing on the progress of coal mining in the whole district, but particularly on the banks of the Tyne. Should the Tyne Coal Company succeed in removing the water from the Tyne collieries, which is confinently expected will shortly be done, and a good seam or seams be met with in this new exploration, which is also confidently calculated upon, it is scarcely possible to exaggerate the importance of those movements to the general trade of the Tyne. The successful accomplishment of them must give a great impetus, not only to the export coal trade of the Tyne, but also to the progress of the various manufactures carried on on the shores of the river. On Satutday last the largest iron vessel ever built on the Tyne was launched from the works of Messrs. Palmer, at Jarrow. This vessel is named *The Scotland*, and has been built for the Liverpool Navigation Company. With the exception of the *Great Eastern* it is the longest vessel ever built, but as she has fine lines, and is intended to attain a great speed, there are, of course, vessels of greater tonnage. A still larger vessel has been commenced at these celebrated works on Monday, a contract having been entered into to construct a transport-ship for the British Government of large tonnage. It is stated that the contract price for this vessel is to be 200,000*l.*; every part of the ship, machinery, &c., to be constructed at Jarrow. The tonnage of this vessel is to be nearly 5000.

The safety-lamp exhibited at the Northern Mining Institute by Mr. A. Dumas is in some respects a remarkable production. It appears to be the first absolutely safe lamp invented; all other lamps are safe under certain conditions, but unsafe when those conditions are altered; and all, however safe, are liable to breakage and accidents of various kinds. But Mr. Dumas states that his lamp—or, rather, the light used in his lamp—will not ignite gas of any kind under any known circumstances, so that his lamp is absolutely safe, and no other lamp can claim this title. The light of this lamp is produced by a portable electric machine, the electricity being produced in a peculiar way, which we have not heard explained.* The lamp has the appearance of a Clanny, but is rather lighter than that lamp; and the portable apparatus which supplies the light is carried over the shoulder of the person using it. It was taken down some of the collieries in this district—the Hetton and Felling. The light given by it is considered by the miners to be rather deficient, being scarcely equal to that produced by a "Davy;" or rather the complaint against it in this respect appears to be that it "glimmers," instead of giving a steady light. The lamp is perfectly cold, the light giving out no heat whatever. The lamp has this important advantage, that the person using it cannot lose his light under any circumstahces, as he can extinguish and light it at will. It is not, perhaps, a lamp capable of practical use in its present shape, but it may possibly by further improvements be made so, and as it is stated to be absolutely safe under all circumstance, it appears very desirable that this should be effected. The first cost of the lamp is great at present, 8*l.* being asked for one of them, but the actual working cost is trifling, being, in fact, about the same as the "Davy"—one penny for nine hours' working.

* A full description of the lamp and apparatus for producing the light was published in the *Mining Journal* of July 2, 1864.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

A GENERAL LOCK-OUT DECIDED UPON.

FEB. 16.—One of the most important meetings ever held in connection with the Iron Trade of this country took place to-day, under the presidency of Mr. W. O. Foster, M.P., Chairman for the year of the South Staffordshire and East Worcestershire Ironmasters' Association, at Birmingham, and the result is a unanimous determination that a fortnight's notice shall be given on Saturday next, at the works throughout South Staffordshire and the North-east of England, that the whole of the works in those districts will be closed until the North Staffordshire men, now out in resistance to a reduction of wages, return to work.

Readers of this letter are fully aware of the circumstances which have led to this extreme determination. In December last, it was agreed at a meeting representing all the iron-making districts in the country, except South Wales, that as 1*l.* per ton had been taken off iron, on the addition of which wages were raised 10 per cent., this proportion should be taken off wages, and as the men are now combined into a National Ironworkers' Association, it was decided that in case the reduction should be only partially accepted the rest of the ironmasters would close their works until the men yielded. The executive of the men's association met at Brierley Hill to consider the question of the reduction, and the result of a long discussion was an agreement that the reduction should be accepted in South Staffordshire and the North of England, but that the men should refuse it in North Staffordshire, the smallest district, and that those in the other districts should support them in the resistance. This policy has been carried out, and the puddlers in North Staffordshire have continued out, the small amount of work done since being only by underhands. The North Staffordshire masters appealed for assistance, and the committee of the association at first replied—"Whit a fortnight, and see if the men will persist, and if they should the question shall be considered." The result is to-day's meeting, when representatives of the trade were present from the Yorkshire, the Durham, and the Lancashire districts. It was stated that so thoroughly organised is the men's association, that any man in the district where the strike prevails who simply goes to any of the works is fined 10s., which is stopped from his allowance, and paid to the informer; and the result is that not one of the men out is seen near any of the works.

At the meeting to-day it was urged on all hands that a National Association of Ironmasters was essentially necessary to meet the new and broader combination of the men; and that may now be said to be formed, all that is necessary being to give it a more definite shape. The Middlesbro' ironmasters had met on the previous day, and bound themselves to act on a lock-out if agreed to; and they were also desirous of effecting a further reduction in wages, which are now 10 per cent. in excess of the old proportion to the price of iron; but as this was not agreed to generally they did not press it. When the men's National Association was formed, the consequence which has now followed of a masters' National Association was anticipated in this letter, and the extent of the struggle it is impossible to forsee. It is to be hoped that the men will yield quietly, for the last reduction was clearly a fair and reasonable one, and the trade is in a very quiet state, though iron is sold below the reduced price.

It is often noticed that casualties happen in groups, and last week two boilers burst in Birmingham, happily without fatal results in either case. An account of a fall of coal at the Earl of Dudley's Salt Wells Colliery, by which six men lost their lives on this day week, was given in the last issue of the *Mining Journal*. On the next morning (Friday) three men were drowned in another pit of the Earl of Dudley, at Tipton, by the breaking in of the water from a part of the canal. Six men and three horses were in the mine when the air was felt by three men in one part of the workings to be affected. They ran to the shaft and were drawn up, but the other three men and the three horses were drowned, being found when the water subsided clinging together. It was stated at the formal opening of the inquest, on Monday, that an old shaft had been struck on the day of the accident. The enquiry was, however, adjourned, Mr. Baker, the Government Inspector, stating that more evidence was necessary. It was clear that the three poor fellows who were drowned were suddenly overwhelmed by the rush of water. It is singular, and specially mournful, that two of them were brothers, and the third, a youth, the son of one of them.

Two men were killed at a colliery worked by Messrs. Hill and Aldchurch, at Ambiscote, near Stourbridge, on Tuesday morning. They were being lowered in a skip at a shaft 40 yards deep, and after descending about half way the skip became detached, when they fell to the bottom, and were at once killed. As the chain was intact, it is supposed

that the skip was only put on the point of the hook, and so slipped off. Both had wives and families.—In the case of the six men killed this day week, the examination has been adjourned.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

Feb. 16.—We have had a better feeling pervading the Iron Trade this week, and more orders have been received than of late, but buyers are holding out hard for low rates, and in some instances lower prices have been accepted by needy sellers. We have marked bars quoted at 8*l.* 10s., hoops 9*l.* 10s., and sheets 10*l.* The rates for Middlesbro' pig are going up, warrants, mixed numbers, selling for 47s., and 6d. less for cash. There are indications in Yorkshire of a widely-spreading iron trade. The Stockton Ironworks have been transferred to a company, with a capital of 250,000*l.*, and the company is erecting a great number of additional puddling furnaces and other works. The large ironworks which have been recently formed into limited liability companies are all doing well, and vastly increasing their trade. For instance, the Yorkshire Iron and Steel Works, at Penistone, are manufacturing upwards of 170 tons of Bessemer steel per week. This company are putting down new machinery, which will greatly increase the production. The demand for rails upon some of the works is greater than can be supplied, and the same may be said of the demand for armour-plates. The new regulation of the Government is causing much discussion amongst those who are engaged in parliamentary committee business, and it is believed that the appointment of referees will facilitate the dispatch of business. There are a great number of railway bills before the House, and orders for rails have been given to an unusually large extent. The Coal Trade is very brisk, and the demand at many collieries exceeds the supply. A large export trade is now being done with France and other parts of the Continent; and as manufacturing industry is improving, the enquiry for coal for manufacturing purposes has considerably increased. There is a great demand for the London and Southern markets, and the rates for the best descriptions of coals are exceedingly firm. The stocks at the collieries are very low of every description of this mineral; whilst the hard, or steam coal, is sent away as it comes to the pit's mouth.

The Mill Dam Mining Company annual meeting was held on Tuesday, at the Albion Hotel, Sheffield, when Mr. Hawksley was called to the chair, and the secretary read a statement of the accounts for the past year, which, after some discussion, were unanimously passed. The secretary then read the report of the managing committee, of which the following is an extract:—

"The long-pending lawsuit between this company and the Hucklow Mining Company has at length terminated; and, although the results have not been quite equal to the committee's expectations, yet, weighing one thing against another, there is no cause for complaint. During the past year 343 tons 1 cwt. 2 qrs. of ore has been sold, realising 4311*l.* 11s. 8d. The committee have received on account of call due Dec. 1, 648*l.* 5s. These sums, together with 35*l.* 5s. 4d. received for sundries, make the total receipts 4995*l.* 2s. The committee have expended the sum of 5209*l.* 17s., which gives a balance against the company of 214*l.* 15s. The quantity of ore raised during the year would have been greater had it not been for the impediments consequent upon the sinking operations which have been carried on during the past year; and now that the sinking the shaft has been completed, it may fairly be expected that the returns of ore for this year will be considerably in advance of the last. It will be remembered that the liabilities at the last annual statement, after deducting assets, amounted to 961*l.* 1s. 3d. The committee have expended during the year in sinking the shaft 16 fms. deeper, and putting in the necessary pitwork, a little over 800*l.* They have also paid as law charges 794*l.* 12s.; making a total of 2555*l.* 13s. 8d. as extraordinary charges, and which cannot possibly occur again. If the amount of the call which has just been made be taken off this sum, it will be seen that the mine has earned 1055*l.* 13s. 8d." The adoption of this report was moved by Mr. Holdsworth, seconded by Mr. Richardson, and unanimously passed. The following gentlemen were appointed as directors for the ensuing year:—Messrs. Hawksley, Marples, Slack, J. S. Taylor, G. Carreer, Robert Cook, Michael Walker, and Robert How. The principal drawback in the above report is the lawsuit, which is now happily ended. The mine appears to have produced a fair share of ore, the receipts from the sale of ore amounting to 4311*l.* 11s. 8d., so that had it not been for law and money expended on plant, a good dividend would have been paid.

Sheffield.—Rather more business is doing with the Federal States of America in steel, cutlery, files, and other tools, but orders are still small. Some fair orders are still on hand for cutlery and tools for India and Australia, but the last mails have brought few additional orders. There is nothing like general briskness in the continental markets. Some moderate orders have come to hand from South America. In some departments of the home trade there is considerable activity, but in other branches very decided dulness. Steel-plates, &c., are ordered freely by the shipbuilders of Scotland and the North, and the railway companies are ordering considerable quantities of rails and rolling stock. The silver-plating trade was moderately good in January, but has rapidly fallen off since, and is now dull. The cutlery and tool branches have undergone little change. Complaints are numerous of the difficulty of collecting money, especially in the agricultural districts. The shareholders of the Mill Dam Mining Company held their annual meeting at Sheffield, on Tuesday, under the presidency of Mr. Hawksley. The report showed that 343 tons of ore have been raised during the year, and realised 4311*l.*, the total income, including 648*l.* on the call made in December, and 35*l.* for sundries, amounting to 4995*l.* The expenditure had been 5210*l.*, being an excess of 215*l.*, but this included 961*l.* in respect of previous liabilities, 800*l.* in sinking a deeper shaft, and 794*l.* in law expenses, making together a special outgoing of 2555*l.*, which could not occur in succeeding years. Excluding this, the mine had earned 1055*l.* beyond necessary expenses, though the sinking of the shaft had impeded the mining operations, and diminished the amount of ore raised. Under all the circumstances the report was considered to be favourable, and was unanimously adopted. Mr. Hawksley and other directors were re-appointed, and the shareholders afterwards dined together. The coal trade here continues extremely brisk. On Thursday a meeting was held of the creditors of Messrs. J. J. Harvey and Co., crinoline manufacturers. The debts were stated at 9000*l.*, and the assets at over 5000*l.* The consideration of a proposition by Mr. Harvey to pay 7s. 6d. in 1*l.* was deferred, a committee being appointed to investigate the affairs, and report to an adjourned meeting.

REPORT FROM MONMOUTH AND SOUTH WALES.

Feb. 16.—Since my last report the Iron Trade has again become a little more in favour of makers, and increased confidence is evinced in every branch of the trade. This slight improvement has been brought about by several causes, perhaps more of a temporary than permanent character. The new Zollverein tariff has had the effect of sending some German orders to the market; the season for the Baltic trade is about to commence, and there is a better home enquiry. The turn-out in North Staffordshire has also been the means of distributing a few orders among the ironmasters of other districts. From these items of improvement, as regards this district, must be deducted an unusual dulness in the American demand, owing mainly to the uncertainty as to whether the war will continue or not. It cannot be denied that there is a growing conviction that peace is not far distant, and if the South are able to obtain terms which will give them any kind of independence, there cannot be a doubt that a great stimulus will at once be given to the trade with this country. The struggle between the men and masters in North Staffordshire causes uneasiness in South Wales, as it is feared that a general lock-out will have to be determined upon in order to compel the men to accept the reduction. There is no change of importance to record in either the steam or house coal trades; the merchants being, as a rule, full of business. The tin-plate trade shows some slight signs of returning animation.

Mr. William Adams, who for many years was manager at Ebbw Vale, has been appointed by the directors of the Aberaman Company (limited) the manager of their works. Mr. Adams will shortly take up his residence at Aberaman House.

I am informed that definite arrangements have been made between the Powell Company (limited) and the Glamorgan Canal Company for the purchase of the Glamorgan Canal, and that the canal is to be made into a railway from the Aberdare district to Cardiff, in opposition to the Taff Vale Railway.

Iron shipbuilding is about to be commenced on the east side of the Usk, at Newport, by Mr. Spittle, the extensive ironfounder. From the advantages which Newport presents for iron shipbuilding, it is believed that this is only the commencement of what will one day be a most important branch of trade on the banks of the Usk.

The Vale of Neath Railway is now virtually amalgamated with the Great Western, in so far as the working is concerned. Great Western engines run over the line, and the coal traffic to the inland districts and the metropolis is already gradually increasing.

The first cargo of lead ore for the Burry Port Smelting-works has arrived, and also some silver ore. The arrival of the ores was the occasion of much rejoicing among the inhabitants.

At the Neath Petty Sessions, on Friday, Charles Price and William Evans, hauliers, in the employ of the Neath Abbey Coal Company, were charged with refusing to work. Mr. Bell, the viewer, and Hodgin, the overman, proved that defendants had refused to work, and some of the other hands had turned out, in consequence of a dispute about wages. Defendants were paid for 21¼ days last month, being the time they worked, but they claimed the full month. Mr. Bell said it was not the custom to pay the men for a day when they had only worked half a day. The magistrates decided that the men were wrong in refusing to work, and directed them to return to their employment, or else they would be committed.

The Risca Widows' and Orphans' Fund.—The report of the committee for the year 1864 states that five widows had married, and received dowries in proportion to their weekly allowances from the fund. Three widows have had their allowances discontinued, in consequence of misconduct; and there are still on the fund seventeen widows, forty children, and eight aged parents, having a weekly allowance of 8*l.* 11s. The accounts showed a balance in the hands of the treasurer, on Dec. 31, of 3304*l.* 18s. 5d., which is calculated to last eight or ten years longer, by which time it is expected that all the orphans will be of age to support themselves.

Extracting Oxide of Iron from "Pickle," and Sulphur from "Green Copperas."—Mr. W. J. Pughsley, of Glanmoor House, Christchurch, near Newport, has completed a patent, which he describes thus:—

For extracting the oxide of iron, water, &c., from the mixture of sulphuric acid, or oil of vitriol, commonly called "waste pickle," and converting the same into sulphuric acid, of strength sufficient as will enable its being used again, I place the pickle in a vessel, and there allow it to remain sufficiently long to crystallise. These crystals are called "green copperas," or sulphate of iron, and the refuse from which is generally termed "mother water." I put the "mother water" in a pan, and evaporate it down to a certain strength, and it is afterwards placed in another vessel, and allowed to crystallise as before. After this, I take the refuse liquor from those crystals, and again evaporate down to a strength sufficiently strong to be used in cleaning the iron for the process of tinning, and which it does as effectually as vitriol and water. For extracting the sulphur from the so-called "green copperas," and converting the same into sulphuric acid, or oil of vitriol, I place the copperas in a retort, and by an application of heat the sulphur escapes into a leaden chamber, or condenser, and there condenses, and from which I make oil of vitriol. The refuse left in the retort is pure oxide of iron.

The patent, we learn, has been successfully adopted at Caerleon, Pontardawe, and the Tydee Tin-Plate Works, and a great saving of vitriol is effected through the invention.

The arrivals at Swansea include—the Havre, from Havre, with 5 tons of lead ore, for H. Bath and Sons; the Golondrina, from Chumari, with 700 tons of copper ore, for Richardson and Co.; the Hortense, from Cherbourg, with 187 tons of iron ore, for W. Crawshay and Co.; the Nord, from Cherbourg, with 80 tons of iron ore, for the Dowlais Iron Company; the Petit Alexandre, from Cherbourg, with 76 tons of iron ore, for — Walters; the Eugenie, from Redan, with 150 tons of iron ore, for R. Cowell.

FOREIGN MINING AND METALLURGY.

The information which we published last week as to sales effected at St. Dizier is confirmed. The sale is also mentioned of 500 tons of charcoal-made pig, with deliveries in February, March, and April, concluded at 4*l.* 11s. 3d. per ton, and to be taken at St. Dizier. Some orders are reported, but they are brought forward less pressingly. Buyers will not exceed 4*l.* 12s., and sometimes only offer 4*l.* 11s. 6d. or 4*l.* 10s. 9d. per ton. Sellers, on the contrary, encouraged by the exhaustion of stock, by the placement during the last two months of a portion of the quantity disposable, and finally by orders which have not been satisfied, agree in displaying more firmness, and several of them even raise pretensions which are not justified by the state of the market. The price of iron does not display any tendency to rise; on the contrary, it appears more feeble, while an exceptional improvement favours pig; it is not surprising, then, that purchasers withdraw themselves. First-class rolled merchants' irons are quoted by continuation at 8*l.* 16s.; sheets (first category), 9*l.* 12s. to 9*l.* 16s.; and special irons (first category), 8*l.* 16s. to 9*l.* per ton. Beaten irons have made 10*l.* 4s. to 10*l.* 8s., and axles 10*l.* 16s. to 11*l.* per ton (ordinary dimensions). Great things are anticipated in France from the St. Louis Canal, which will put the Lower Rhone, near Arles, in communication with the sea in the Golfe de Fos. A sum of 32,000*l.* is devoted to this important work in the budget of 1865, and no French project appears likely to be attended with more important results for the Lyons group of industries, as well as other neighbouring enterprises. The canal takes its rise at the Tour St. Louis, below Arles, at a point where the Rhone has a width of rather more than 500 yards, while it is about 35 ft. deep. The canal cuts a tongue of land extending over 3½ miles, and terminates in one of those tranquil gulfs which surround Marseilles. The bay into which the canal will fall will offer a sure shelter for ships; sailors have even named it the Cove of Repose, in consequence of the placidity of its waters; its anchorage is also excellent. The canal will be 200 feet wide, and 25 feet deep, dimensions analogous to those of the Suez Canal. As to the level of the two liquid elements, it is almost the same, the difference between the Rhone and the Mediterranean scarcely exceeding 1 ft. The expense involved will not exceed 320,000*l.*, of which the State supplies 260,000*l.* The towns of St. Etienne and Grand' Combe will be the first to feel the benefits of this great economic means of communication. Already, thanks to railways, the coal of these two great producing centres has driven English coal from the Marseilles market. Thus, in 1857, English coal arrived at Marseilles to the extent of 86,000 tons, in 1860 the corresponding imports were only 10,000 tons, and in 1862 they had ceased altogether. As regards 1863 and 1864 we have no information; possibly some revival may have taken place. But it appears probable that the St. Etienne and Grand' Combe basins will receive a great stimulus when ships coming from Odessa, Alexandria, or Constantinople find at the Tour St. Louis a return freight of coal, brought by boats plying on the Rhone. Works adjoining these productive basins will also be benefited when the minerals which they draw from Sardinia and Spain can be brought to them direct by means of fluvial navigation.

Some time since we gave details showing the production of the mines and ironworks of Prussia. Our figures were then confined to 1862, but we are now enabled to extend them to the close of 1863. Annexed are very copious particulars of the production during the last-mentioned year:

	Quantity.	Value.
Coal ..... Tons	14,304,575	£3,504,160
Lignite	4,026,304	547,073
Minerals of all kinds	Not stated.	1,190,578
Pig	582,550	2,275,975
Steel pig	19,997	109,178
Cast pig, first fusion	34,131	287,049
Iron	347,972	3,417,336
Unworked steel	28,975	421,299
Zinc	60,311	950,007
Silver	23	263,371
Gold	Not stated.	31
Lead and litharge	24,409	461,277
Copper	2,682	253,204
Nickel	375	87,621
Arsenic	261	4,366
Antimony	60	2,400
Alum	2,588	24,803
Copperas	2,392	8,306
Sulphate of copper	264	5,130
Sulphur	310	2,870
Cadmium	Not stated.	61
Salt	200,711	252,188

The value of the coal and lignite produced in Prussia in 1863 was thus 4,051,232*l.*; of the iron minerals, &c., 1,190,578*l.*; of the products of the blast-furnaces, 2,071,685*l.*; and of the other miscellaneous products, 2,255,635*l.*—making a general aggregate of 10,169,128*l.* The number of workmen employed in the coal and lignite workings was 83,307; in the other mines, 41,490; and in the ironworks and saltworks, 74,035—making an aggregate of 198,832.

The improvement in the monetary situation of Europe gives hope to Belgian industrials. What is required on the part of Belgian metallurgical industry, in order to enable it to maintain the position which it has now acquired, is a great activity in the creation of new enterprises, and a constant development of companies for carrying out public works. The production of Belgian iron, which is now very considerable, can only be run off advantageously on these terms, and the least check in the spirit of enterprise will, probably, be soon followed by a proportionate feebleness in quotations, and in the facility of running off goods. This is what was remarked in the last few months of the exercise 1864, quotations having become weaker, while the period of prosperity enjoyed by the works has been a little shaken. But it is hoped that a general revival in affairs will now exert in its turn a happy influence on industry. The question now is whether the expansion of industry generally will continue. It may be affirmed that the crisis of credit in 1864 is over, well over; but it was slow, although violent; it strongly affected all branches of industry, and it opened wounds which are, perhaps, not fully healed. This description of crisis more profoundly affects industry generally than others which have happened previously, which have, perhaps, been more violent, but have been of shorter duration. If it is true that as soon as crises terminate industry again prospers, and extends itself, perhaps this movement will re-establish itself more slowly under present circumstances. It is desirable, then, that European industry, scarcely escaped from the depression which has long weighed upon it, should not fall into its first faults, but should act with prudence. These considerations have not, perhaps, much connection with the iron trade, which has many other supports besides the creation of new enterprises, such as railways, ports, &c., but at the same time some observations on the subject do not appear out of place, as they show the imprudence of relying too much on an uncertainty, which can alone find its full solution in the future. To reckon on an increase of orders in consequence of great enterprises newly created in distant countries is still more uncertain, as English metallurgists are more favourably situated than those of Belgium to profit immediately from a revival in industry, while they are also in a position not to allow the occasion of profiting by this state of things to escape them. A Charleroi journal, after having reported that some sales have been concluded at prices below the average quotations, says:—"This refers to works which, some months since, delivered bad iron on the market, and which now can run off their production only by tempting purchasers with cheapness. It is only in times of dearth that bad irons are accepted by commerce at tolerably remunerative rates. During the last two years much bad pig has been made in the district by the adjunction of the refuse of old forges and the dross of rolling-mills. The bad effects of these materials are now beginning to be understood in rails, and attempts are being made to consume them in irons of commerce, but it will soon be out of the question to tempt purchasers by the low prices at which irons manufactured with indifferent materials are offered. This refuse has discredited English iron for some time, and a reaction has set in in England against its employment, such as is now remarked in Belgium." At Charleroi, as at Liége, a good current of orders is noticed in refining pig, and prices are firmly maintained. The demand is less strong for rolled irons, and heavy plates are especially neglected. Quotations of iron generally are less well supported than those of pig. The construction workshops are pretty well provided with orders in Belgium. The Couillet Company has concluded a contract for locomotives intended for Havana. Rails which have for some time past been entirely neglected, are in a little better demand, some contracts being in sight. From Liége it is reported that the prices of oligiste minerals are firmer. The minerals of the Dutch Limbourg enter also to a more important extent into the consumption of many blast-furnaces in the neighbourhood of Liége. At Charleroi oligistes are advancing, 10s. to 10s. 10d. per ton being paid for qualities used in blast-furnaces, and 13s. per ton for qualities used in puddling-furnaces. Good hydrated minerals are also advancing. The production of coal as well at Charleroi as in the Centre, at Mons and at Liége, is tolerably easily absorbed at present prices, and no stocks are being formed. This observation applies more particularly to half-rich coal, which is especially sought after. Freights have slightly risen.

The foreign copper markets present little interest. Affairs are in a languishing state, and nothing leads to the anticipation that an improvement is likely to arise shortly. At Amsterdam, Drontheim has made 57 fls.; English, 54 fls.; Swedish, 56 fls.; and North American, 60 fls. At Havre, Chilian and Peruvian in bars have made 80*l.*; Peruvian mineral (pure standard), 89*l.*; United States (Baltimore), 92*l.* to 94*l.*; ditto, Lake Superior, 94*l.* to 102*l.* 16s.; Mexican and La Plata in bars, 78*l.*; Russian, 96*l.* to 100*l.*; old yellow copper, 56*l.* to 60*l.*; red ditto, 53*l.* to 84*l.*; and bronze, 70*l.* to 80*l.* per ton. At Antwerp, American has made 108*l.* per ton. At Paris the quotation for English in plates has been 88*l.*; tough cake, 88*l.*; Lake Superior, 102*l.*; Chilian, 82*l.*; Corocoro mineral, 86*l.*; rolled red, 100*l.*; and yellow ditto, 98*l.* per ton. Attention has been a good deal directed during the last few days to tin. The notice of the Netherlands Society of Commerce, to which allusion was made last week, has exerted a favourable influence on the article, which has risen as well in London as in Holland; at the same time, important stocks exist both on the English and Dutch markets, so that the trade need act with circumspection if it wishes to avoid future misfortunes. At Rotterdam, Banca has made 59 fls. to 59¼ fls.; Billiton, 59 fls. to 59¼ fls.; and English, 59 fls to 59⅛ fls. At Amsterdam the quotation for Banca has been 59 fls. At Paris, Banca has been quoted at 102*l.*; Detroit, 97*l.*; and English, 96*l.* per ton. At Havre, Banca has made 94*l.*; Detroit, 91*l.*; Peruvian, 76*l.* to 82*l.*; and Peruvian mineral, 40*l.* to 48*l.* per ton. Lead has been in no great demand, but former rates have been maintained; at the same time, in purchases of some importance holders would consent to do business on lower terms. At Paris, Spanish sammons make 22*l.* 12s.; French, 20*l.* 18s.; Belgian, 20*l.* 16s.; and rolled, 22*l.* 16s. per ton. At Havre, Spanish has made 20*l.* per ton. Transactions in zinc have been more active, and the improvement lately noticed in prices is sustained. At Hamburg and Breslau the article has been firmer, with few sale offers. At Paris rough Silesian has made 20*l.* per ton; rolled, 23*l.* 4s.; and Vieille-Montagne, 28*l.* per ton. At Brussels the zinc of the Vieille-Montagne has been quoted as follows:—Rough and ordinary, 22*l.* per ton; rolled, sheets of commerce, No. 5, 43*l.* per ton; ditto, Nos. 6 and 7, 38*l.* per ton; ditto, Nos. 8, 9, and upwards, 28*l.* per ton; sheets for sheathing ships, Nos. 14 and upwards, 30*l.* per ton, &c.

To conclude with a few miscellanies, we may note that the Providence Forges and Blast-Furnaces Company is completing at present, near la Hautmont works, in France, the establishment of a workshop, which is to be devoted to the manufacture of the wheels of railway carriages and trucks. The Sayn forges, in Rhenish Prussia, have been sold to M. Krupp, the famous manufacturer of steel and cannon at Essen, for 500,000 thalers. The French company, doing business under the title of the Chantiers et Ateliers de l'Ocean, will pay on, May 1, the balance of the dividend accruing for the exercise 1863-4, or 1*l.* per share. The total distribution for the exercise will thus be 2*l.* per share.

THE GOLD FIELDS OF AUSTRALIA.

Melbourne, Dec. 24.—Now that the end of the year is drawing nigh, it is satisfactory to know that the yield of gold has been well maintained. The exports alone furnish reliable data on which to base this conclusion, and up to the present time these amount to only a few thousand ounces below those of last year, to be very probably brought up to an equal quantity by the export of next week. It must not be supposed, however, from this that there is any return of prosperity to the poorer classes of miners—the pick-and-shovel men, as they are called on the diggings—for they have each year a greater difficulty in finding a living as the old and shallow ground is worked out. In no one twelvemonth has there been such an addition to the number of men on the gold fields working for hire, and the total yield has only been kept up by the increasing returns obtained from the deep leads, and by the very much greater quantity of gold which has been taken out of the new reefs at Wood's Point and on the Gipps Land side of the ranges. The turning point has apparently been reached at length, and the failure of the shallow ground will soon be more than compensated for by the increasing yield from mines properly so called in which capital has been invested. The old independence of the miner is thus in a great degree lost, but with that independence there was too often recklessness and improvidence, and the altered state of things will give more stability to the yield of gold and all connected with this interest, and the men working on wages will in reality be able to live better, and far more free from care, than the majority of them did when nominally their own masters.

On the whole, the yield of gold from the reefs has been, perhaps, better maintained than the yield from the alluvial ground, if we except the deep leads. And from the reefs generally there will be no falling off, if there is not an absolute improvement, for the opening of roads into the mountain regions is being taken advantage of to send machinery where none has been before, and where there are thousands of tons of rich stone ready for the mill. Such is the case at the Crooked River especially, and it will not be long before many sets of stampers are at work there. The Wood's Point reefs are still yielding freely, and averages of 4 and 5 oz. to the ton are not unfrequently announced from the reefs on the other side of the range. A few rich veins have been opened in other directions also, a parcel of 18 cwt. of stone from one of these near Mount Korong producing 195 ozs. 6 dwt., or at the rate of 510 oz. to the ton. One ton of stone from a reef discovered a couple of months since in the M'Ivor district produced no less than 231 oz., the yield from 60 tons crushed during that time having amounted to 700 oz. 13 dwt. in all. Forty-four tons out of another reef in this district producing 186 oz. 11 dwt. Very good stone has also been taken out of the Pyrenees reef, 110 tons of this having yielded 447 oz. Then 11 tons from a new reef in the Castlemaine district produced 114 oz. and a load of surface stone from a reef just found at the foot of Mount Alexander yielded 38 oz. Among the best yields lately obtained in the Bendigo district was one of 117 oz. from 30 tons out of Specimen-hill, and another of 256 oz. out of 80 tons of a claim on the Windmill-hill. The Tarrengower reefs have also been yielding very fairly; but the Inglewood reefs are now yielding comparatively little, nor will there be any improvment in them until there has been a sufficient expenditure of capital, for the best of them are down to the water-level. The Port Phillip Company, at Clunes, crushed 1160 tons of stone last week, with a yield of 358 oz. 12 dwt.; and during the month of November 4210 tons, with a yield of 1707 oz. 8 dwt. The Clunes United Company crushed 600 tons from the deep ground in their claim during that time, with a yield of 363 oz. 6 dwt. Large returns have been obtained by the principal deep-lead companies at Ballarat lately, and shares in these have advanced still higher in price, without the aid of speculation. Thus, the Koh-i-Noor Company washed out 1678 oz. during one fortnight, and 1253 oz. the next; but the Band of Hope Company did even better than this, having obtained 1969 oz. for ten days' work in the first period, and 2757 oz. during the second fortnight. It is not many weeks since this company broke into the gutter, and such returns, which are expected to be steady, will help to keep up the total yield of the colony. The largest of the lately-found nuggets was one of 86 oz., obtained by a party of Chinese at Burnt Creek. Others weighing 45 oz., 31 oz., and 25 oz. were found respectively at Tarnagulla, Inglewood, and Kingower.—*Melbourne Argus.*

Adelaide, Dec. 24.—Galvanised iron of every description is plentiful, but prices are unaltered. Plate, steel, and hoop continue firm. In fencing wire there has not been much doing, owing to the farmers having other work to perform. The consequence is that to effect sales a reduction has to be submitted to. There are no sales of copper to report since the mail arrived. Both the Burra and Wallaroo Companies had sold heavily just before, and they decline to sell at present except at former rates, as they prefer awaiting the next English advices before fixing lower prices. We continue to have a fair number of arrivals of coal from Newcastle, N.S.W., and no alteration in prices of any note has transpired. The directors of the Moonta Mine have declared another dividend of 10*l.* per share, payable on Jan. 2. A great number of fine buildings are being erected in different parts of the city. So great is the state of prosperity that not a single tender was sent in for the erection of the new powder magazine in Adelaide. Builders and artizans are fully employed.

AUSTRALIAN MINES.

Kapunda.—December 26: The quantity of ores raised in October was 270 tons of 20¼ per cent. average produce, equal to 55¼ tons pure copper, exclusive of 65 tons sulphur ores for flux. The quantity raised in November was estimated at about 270 tons. Since the date of last advices 71 tons of copper had been shipped per *Murray.*

Yudanamutana.—Adelaide, Dec. 26: The superintendent writes—I enclose bills of lading for second shipment, per *Orient*, of 122 pigs of copper, and 5 tons of ore, of 40 to 45 per cent; I have also shipped, per *City of Adelaide*, 22 tons of ore, of 40 per cent., and 105 cwts. of copper. A further quantity of from 14 to 16 tons of copper is in course of transit to port, but I fear it will not be down in time to ship by this vessel. The reports from the mines continue most satisfactory. The horse teams from Melbourne are daily expected, and upon their arrival they will be immediately dispatched to the mines, for I hope to get a large quantity of ore down in time for the late wool ships, as I am extremely anxious to secure shipments, in order to prove the richness and great value of these mines. The want of cartage, occasioned by the long-continued drought, coupled with the disease amongst the working cattle, has been the great drawback we have had to contend with; and when that difficulty is overcome we shall be entirely self-supporting, and in a position to leave large profits to the shareholders.—Captain Anthony reports, December 18: Bilnman Mine: The 20 fathom level is now driven 5 fathoms north of No. 2 shaft; for the whole of that distance, and in the present end, the lode will pay for driving, at 15*l.* per fathom; the same level south is holed to the big bunch. The lode in this level, at No. 2 shaft and No. 1 winze, and also in the bottom of the big bunch, has changed its underlie from west to east. We have always had indications of a branch standing to the eastward of our present workings, it now remains to be proved whether we have been working on only a branch or on the main lode. I do not intend putting a large number of underground hands to work for some time, there being sufficient ore at surface, when dressed, to keep the drays going, independent of ore from underground. The dressers have been employed during the month cleaning up halvans and stray ore. From No. 2 furnace we have run out 60 pigs of copper; this furnace is now under repair. The stack for No. 3 furnace is complete, and the ash-pit and foundation ready for the fire-bricks.

Worthing.—The advices from the Bremer Mine are dated Dec. 23, and they continue most satisfactory as to the profitable development of the mine, which is anticipated to prove one of the best paying and most lasting mines in the colony. The outlay for the month had been 246*l.* 9s. 6d.: 240 tons of ore had been raised and dressed in the month, 60 tons of regulus made, and 84 tons 3 cwts. of regulus, the usual quality, about 50 per cent., had been delivered to the English and Australian Copper Company, and on hand about 33 tons of regulus, and 150 tons of ore. Hands employed, 150. The lode in the 53, south of Legg's engine-shaft, continued to improve, and was now very productive, yielding a great many tons of ore per fm., and the price for driving the same only 9*l.* per fm. Boundy's lode, at the shaft, had very much improved; it was 4 ft. wide, and yielded black and very rich yellow ores, coated with black, and had every appearance of being close to a large deposit of ore. The greatest improvement, and one of the most importance, had taken place in the 63, close to Legg's engine-shaft. The lode had been cut into 3 ft., and no sign of a western wall, composed of rich yellow ore, peach, prian, and white quartz—the ore very soft, and what they called rotten ripe, going into smalls as broken, and very much like that in the 53 fm. level, proving an immense increase in the reserves of ore, and adding much to the value of the mine. The advices, on the whole, are most sanguine, and promise most beneficially, and far in excess to those recently received.

Port Phillip and Colonial Gold.—Mr. Bland, Dec. 23: Quartz Crushing: The quantity of quartz crushed during the month of November was 4210 tons with a yield of 1707 ozs. 8 dwts. 12 grs. gold. The receipts for the same period were 2439*l.* 6s. 4d.; payments, 1353*l.* 17s. 9d.; profit, 1085*l.* 8s. 7d. The above return shows an increase in the quantity of quartz crushed of 511 tons for the month, but a further diminution in the yield of 15 grs. per ton. The yield was still further considerably reduced in the early part of this month, but has during this week shown an improvement again. Advantage has not yet been taken of stoping on the more productive parts of Robinson's vein in the southern ground, nor on the large quantity of ground standing in reserve on the main portions of the eastern vein.—Return for December: Quantity of quartz crushed, 4574 tons; yield of gold, 1400 ozs. 2 dwts.; average, about 6 dwts. 3grs. Remittance, 400*l.*

Wheal Ellen.—Capt. Barker, Dec. 23: Squarey's engine-shaft measured on survay-day 6 ft. 3 in., making a total below the 40 fm. level of 10 fms. 4 ft. 9 in. The 50 fm. level cross-cut measured 1 fm. 1 ft. 7 in., and has since been driven 4½ ft. without any appearance of the lode as yet. The stratum driven through is underlying at the rate of 5 feet to the fathom, consequently we may have to drive another 9 or 10 feet before meeting with the lode. We are pushing on our smelting operations as fast as circumstances will permit; but our present calciner being very small, our progress is proportionately slow.

Fortune Copper.—Advices have been received from Mr. L. Samson, (Dec. 26) enclosing bills of lading for 80 tons lead ore and 31 tons copper ore per *Zidi*, and 20 tons copper ore per *Daylight*. Capt. Penberthy, Nov. 29:—"The new engine-shaft is sunk 5 fms. below the 40. Here we have intersected a lode of yellow copper ore 20 in. wide, worth 40*l.* per fm.; the lode looks well for a large deposit of copper ore.

The stopes in the back of the 40 are producing 2 tons of copper ore per fm. The four stopes in the back of the 30 are producing severally 3¼ tons of lead ore per fm., 2½ tons of lead ore and 1 ton of copper ore per fm., 3½ tons of lead ore per fm., and 2 tons of lead ore per fm. The stopes in the back of the 10, south-west of shaft, are producing 1½ ton of grey and green carbonate of copper ore per fm., of 25 to 30 per cent. I am glad to say the mine is improving, and in a few months we shall be in a very good position, being able to command a good and large piece of copper ore ground. We have dressed this month 20 tons of copper ore and 50 tons of lead ore, of good quality; and at the Bay we have 281 tons rich lead ore ready for stamping."

ENGLISH AND AUSTRALIAN COPPER.—At the date of the last advices, Dec. 26, the quantity of coal at Kooringa was 200 tons, at Kapunda 610 tons, and at the Port Works and afloat 1038 tons. There were three furnaces at work at Kooringa, and four at Port Adelaide. Since the date of the last advices, further shipments of 270 tons of copper had been made. The company's affairs were progressing very satisfactorily, and the horses and mules were in good working order.

SCOTTISH AUSTRALIAN.—Dec. 22: Lambton Colliery: The colliery viewer reports that the quality of the company's coal continued fully to maintain its good character. The quantity of coal sold and shipped by the company at Newcastle during the month of November last was 8371 tons. Owing to the summer season the coal trade continued, of course, to be rather dull.

CADIANGULLONG CONSOLIDATED COPPER.—Dec. 22: Copper Mines: The improvement in the different workings has been maintained. During the month there have been raised 146 tons of ore, of a percentage varying from 5½ to 33½, average 11⅝, yielding on assay 17 tons of fine copper. Capt. Holman reports:—"The quantity of lode stoped in the month has been 37 fms. 4 ft. 4 in., driven on lodes 19 fms. 5 ft., and sund 24 fms.: total, 81 fms. 3 ft. 4 in. On the whole, the mine may now be said to be in a fair way of being established as a permanent mining property."—Smelting-works: 36 tons of fine copper have been sold in Sydney. The metal on hand at the works was equal to 30 tons more of fine copper in a forward state. There were also 350 tons of ore on hand. The stock of wood on hand at the works was 2350 tons.

YORKE PENINSULA.—Dec. 27: The committee of inspection visited the property on Dec. 6, inspected the workings, and found everything in at mine in good order, and the Kurilla engine working well, and by itself keeping the water in fork with less than half its power. The portable engine from the Bon Accord property had arrived, and been put in position, but its power had not yet been required. The chairman of the committe writes:—"There is a good prospect of our new adventure turning out a succ[illegible]." Three assays of ore, considered to be fairly broken from the lode, had been ma[illegible] the colony, and their yield respectively was 31⅛, 34⅛, and 35⅛ per cent. for cop[illegible] An assay of a large sample of ore received in London by the last mail has also been made by Messrs. Johnson and Matthey, and their report states that it contains nearly 25 per cent. of copper. This last assay was the result produced from an average of all the specimens of which the samples are composed. These assays, of course, show that the mine contains rich and valuable ore, but further development is necessary, in order to prove the quantity. The leading character of the ore is black oxide, with grey and yellow sulphuret more or less disseminated throughout it.

AURIFEROUS QUARTZ MINING—No. I.

BY THOMAS BELT.

Auriferous quartz veins occur in strata belonging to all geological ages, excepting the later tertiary, but they have only been worked profitably in Europe, Asia, Eastern North America, and Australia, in rocks of Lower Silurian age, or in that debatable ground claimed by some geologists as Lower Silurian, by others as Upper Cambrian. In South America and in Western North America they are, however, found principally in secondary rocks. Mr. Whitney, the director of the Geological Survey of California, in a recent report states that the great metalliferous belt of the Pacific coast of North America is made up of rocks of Jurassic and Triassic age, with a comparatively small development of carboniferous limestone, and that gold occurs in considerable quantities in rocks as high up in the series as the Cretaceous, and, moreover, that not a trace of a Devonian or Silurian fossil has been discovered in California.

It has been clearly established that gold lodes of the first-class, or those that traverse the Paleozoic rocks, decrease in value in depth. This conclusion has been much contested in Australia, where there are lodes now being worked with profit at depths of from 300 to 500 ft. from the surface, and which have paid throughout. But in 1863 a commission appointed by the Legislature of Victoria visited the different gold fields of that colony, and after taking evidence on the subject, and with every disposition not to undervalue the resources of the colony, came to the unanimous conclusion that as a rule the quartz veins got poorer the deeper they were worked. The Clunes Company's Mine, that from which the Port Phillip Company, of London, have made such large profits, has often been pointed to in favour of a different opinion, but the average result of the last four years' operations shows that it does not form an exception to the general rule, as the following table will exhibit:—

QUARTZ CRUSHED BY THE PORT PHILLIP GOLD MINING COMPANY.

	Tons crushed.	Gold obtained.	Average per ton.
1861	32,258	24,326 ozs.	15 dwts. 2 grs.
1862	34,236	22,012	12 20
1863	40,360	22,987	11 9
1864	44,149	17,611	8 0

In some instances the deterioration in value is extremely rapid, or even sudden; in others gradual, and only perceptible by taking the average yield of large quantities from different depths. These latter cases are sufficiently numerous to render gold quartz mining a legitimate field for the judicious employment of capital. In one respect it is to be preferred to other metalliferous mining, a much smaller expenditure is needed to prove whether the lodes are worth working, as only the backs or tops need to be tried, and the necessary machinery for testing the quartz is of a simple and inexpensive character.

Should the outcrops of the lodes not yield sufficient gold to give profitable returns, it is folly to proceed further, as not only is the gold likely to be in larger quantities at or near the surface, but the accompanying sulphurets have generally been dissolved out, so that the gold is easily extracted, and thus it has often happened that the first crushing from a quartz lode has given much greater results than have ever afterwards been obtained. Several such instances have occurred within my own experience. The prosecution of deep explorations, when surface ores have failed, is a mistake seldom made by the experienced gold miner.

The first step in gold mining is to have the property supposed to contain gold examined by some competent gold miner, who ought to report upon the character of the lodes, the probable cost of extracting the quartz per ton, the facilities the ground offers for mining, and the manner in which the gold occurs, whether in shoots or pockets, or disseminated throughout the lode. These last particulars can only be obtained very imperfectly, as generally only some small portions of the lodes can be examined where they crop out at the surface, or where exploratory excavations have been made; and as it is important that they should be ascertained before extensive works are erected, the best plan is, if the report is favourable, to put up a battery of four or eight stamps, according to the width and extent of the lodes, and some simple amalgamating apparatus, hereafter to be described. However promising appearances may be at this stage, it would be imprudent to launch into extravagant expenditure until the lodes have been proved in depth and length, for the gold is so often concentrated in patches, and narrow strings or shoots, that it is generally necessary to treat from 300 to 500 tons of quartz before an estimate of its average yield can be formed, and it has been found in practice that no reliance can be placed on assays of the quartz, from the impossibility of taking [illegible]ts that will fairly represent the bulk of the lode. Sometimes the [illegible]y is concentrated in small bands exceedingly rich, whilst the bulk of the lode is nearly worthless. In such a case a small party of miners, confining themselves to the rich portions of the lode, may make large profits, where if the mine is turned over to a large company, and extensive reduction works erected for treating the quartz *en masse*, total failure may ensue. It cannot be too earnestly impressed upon adventurers in gold mining that their attention should at first be directed towards the development of the mine, and only sufficient machinery erected to test its value. A battery of eight stamps will reduced from 60 to 100 tons of quartz per week, according to its hardness. It should be planned, so that it will form part of a larger series, if the result be satisfactory. The cost will vary according to circumstances. In Nova Scotia I erected a battery of eight stamps, amalgamating apparatus, buildings (wood), water-wheel, &c., for a total cost of 600*l*. In this instance the patterns for castings were made on the works. With regard to the average yield of gold per ton that will warrant more extensive works, no general rule can be given. It will depend principally on the width of the lodes, and also on the situation of the mine, whether the quartz can be attacked by adits, or it will be necessary to sink shafts. The cost of mining a lode 1 ft. thick will, in most cases, be as much per fathom as one 4 ft. thick, so that in the latter the quartz will be obtained for one-fourth the cost per ton of the former. With a lode 4 ft. wide an average yield of from 4 to 6 dwts. of gold per ton will give large profits, when worked economically on an extensive scale. Wider lodes, easily mined, have been worked profitably in Australia, that only averaged 2 dwts. of gold per ton.

In auriferous lodes of the second-class, those that traverse rocks of secondary age in America, we have no proof of a decrease in value in depth, and in South America especially they compare very favourably with the gold veins of the Old World and of Australia. They are generally of large size, and the gold is disseminated throughout the gangue. The drawbacks are the great difficulty of transporting machinery to the mines, the scarcity of skilled labour, and the unsettled state of some of the South American Republics, otherwise the auriferous lodes of South America offer greater inducements for the investment of capital than those of any other part of the world.

With these few general remarks on gold mining, I proceed to describe the machinery and processes necessary for gold extraction. I do not intend to enter upon a discussson of the merits of the various machines that have been introduced for that purpose, but simply to describe those that, after considerable experience in Australia, America, and North Wales, I have been led to adopt.

THE MOUNT CENIS TUNNEL.—Considerable interest being felt as to the actual progress in the driving of this celebrated tunnel, we subjoin a statement of the work actually done, and still remaining undone, expressed in English linear yards and hundredths of the same. The total length of the tunnel, as projected, is 13364·20 yards. Of this there had been driven at the Bardonèche (Italian) end 1860·07 yards to the end of 1863, and 679·35 yards in 1864 = 2539·42 yards; whilst at the Modane (French) end there had been driven 1418·83 yards to the end of 1863, and 510·34 yards in 1864 = 1929·17 yards; together 4468·59 yards, which, deducted from 13,364·20 yards, as above, shows 8895·61 yards remaining to be done. Thus we see that one-third of the work is at present excavated, and two-thirds remaining to be done. At the present rate of progress, the tunnel could be completed in about eight years.

PRIZE FOR GEOLOGY—UNIVERSITY OF CAMBRIDGE.—An endowment has been offered to the University for the establishment of a prize for proficiency in geology. The prize is to be called the "Sedgwick Prize," in honour of the present respected Professor, and will consist of the interest of 500*l*. railway stock. It is at present proposed to award the prize once in three years.

INSTITUTE OF ENGINEERS IN SCOTLAND.—The present issue of the "Transactions" of this society includes several highly interesting papers and discussions upon them. The introductory address of the President, Mr. James R. Napier, is valuable, as pointing out the means by which our present measures might be adapted to the decimal system. There is the continuation of the discussion "On Bituminous Paper Pipes," and papers "On a Machine for producing Cold by the Expansion of Air," by Mr. A. Kirk; "On a New Method of Building under Water," by Mr. John Moffat; "On certain recent Improvements in the Manufacture of Cast-Iron Pipes," by Mr. George Lauder; and "On an Improved Boiler Carriage," by Mr. John Yule. The several papers are accompanied by admirably executed plates, which render the understanding of the papers and the discussion which followed the reading of them particularly easy.

GEOLOGICAL SOCIETY OF LONDON.—Feb. 8: W. J. Hamilton, (President), in the chair. Capt. William Arbuthnot, Hyde Park-gardens, W.; Robert Bell, Professor of Geology in Queen's College, Canada West; William Henry Leighton, Merton-place, Chiswick; and Viscount Milton, F.R.G.S., of Wentworth Park, and Grosvenor-square, W., were elected Fellows. The following communications were read:—

1.—"On the Sources of the Mammalian Fossils of the Red Crag, and on the Discovery of a New Mammal in that Deposit allied to the Walrus," by E. Ray Lankester, communicated by Prof. T. H. Huxley, F.R.S., F.G.S.

2.—"Note on the Geology of Harrogate," by Prof. John Phillips, M.A., F.R.S., F.G.S.

On Wednesday the following papers will be read:—1. "On the Lower Silurian Rocks of the South-East of Cumberland, and the North-East of Westmoreland," by Prof. R. Harkness, F.R.S., F.G.S.—2. "Note on the Volcanic Tufa of Latacunga, at the foot of Cotopaxi," by R. Spruce: communicated by Sir R. I. Murchison, K.C.B., F.R.S., F.G.S.—3. "On a Discovery of Flint Implements in the Drift at Milford Hill, Salisbury," by Dr. H. P. Blackmore: communicated by John Evans, F.R.S., F.G.S.

PETROLEUM AS STEAM FUEL.—Mr. Richardson's experiments with a view of introducing petroleum into the service for steam fuel have been suspended for some time, in consequence of the bursting of the small grate used in the preliminary trials. The grate was of cast-iron, ¾ in. in thickness, and composed of several pieces of iron, with a surface of 2 ft. only. It was worked under the boiler of an engine of 14-horse power, and succeeded, with 4 gallons of oil, in getting up steam in an hour and a half. The valve was then closed at 10 lbs. pressure. Steam was kept up for another hour, with the expenditure of an additional gallon of oil, the steam blowing off about half the time. The grate not being strong enough to resist the pressure opened at the joints. Mr. Richardson subsequently submitted to the Lords of the Admiralty, by their desire, some working drawings of a design for a wrought-iron grate, available for practically testing the use of petroleum. The grate is now under construction in the steam-factory of Woolwich Dockyard. Its estimated cost is about 150*l*. Mr. Richardson's design, with various ameliorations added by Mr. Trickett, Inspector of Machinery, superintending the factory, was on Thursday laid on the floor, and the work was then put in progress. If the anticipations are realised the result will be most important.

THE CANNEL COAL OF FLINTSHIRE.—The Flintshire Coal Field appears to have been worked from a remote period, as both tradition and documentary evidence prove that coals were raised from it so far back as the reign of Edward the Third; but the extent of the coal field is limited, as it is estimated to possess not more than about 60,000 acres of area. The coal seams are comparatively near the surface of the ground,—that of the main coal, which is the principal, and also the deepest worked before the discovery of the cannel coal, not being more than 125 yards below the surface. Indeed, before this discovery it was a rare thing for a coal pit in this district to exceed 150 yards in depth. The discovery of this valuable cannel coal is a remarkable instance of what some may be disposed to regard as a consequence of a general law, that the productions of Nature always presents themselves at the moment when the necessity for them begins to be pressing; and the manner of the discovery was as singular as it was fortunate. It seems that the owner or lessee of the Leeswood Green coal pits, in pursuing some investigations in the old workings, drove a small gallery to a point where there had been a complete dislocation of the coal strata, with a rise or upthrow of 25 yards in the strata which had been broken away from those in which the gallery was driven. The consequence of the disruption of the coal seams was to place in opposition to the point at which the gallery terminated a series of strata of a different character, and in the lower of these was distinguished a peculiar kind of shale, which, for its remarkable appearance, led to further examination, and finally it proved to be the overlying shale of a series of cannel strata, together making up a seam several feet in thickness of, perhaps, the most valuable cannel coal ever discovered in Britain. It is still a question, *sub judice*, whether the Boghead coal of Scotland is really a coal or a schale. Courts of law have declared it to be a coal, at least commercially, but many eminent scientific men still maintain that it is only a highly bituminous shale. However this may be, no question of the kind can arise concerning the Leeswood cannel coal, which is in every respect a true cannel, but yielding liquid products when distilled as abundant and as good in quality as those obtained from Boghead cannel. One of the principal characters upon which the advocates of the shale doctrine concerning the Boghead mineral rely, is the peculiar nature of the coke or residue left when the mineral is distilled. This, like the coke from acknowledged shales, contains a very large per-centage of aluminous ash, which renders it totally worthless for fuel; but the Leeswood cannel coal is free from this defect, and yields, after distillation, a compact coke, which, from one variety of the cannel, is almost unequalled in quality. In 1859-60, this coal was placed in the hands of the late Dr. Fyfe, of Aberdeen, and Mr. Keates, of London, for thorough chemical examination: lengthened reports were made by those chemists as to the quality of the coal, both as a gas coal and in respect to its oil-producing capabilities; and these reports were of such a character, that since that period the coal seems to have been gradually more and more highly appreciated. The principal characteristic of Leeswood cannel coal is its extreme bituminousness, to coin a word: a small piece, thrown into a fire, immediately ignites, and burns with a bright white flame, throwing off at the same time an abundance of separated carbon; and when distilled at the gas-making temperature, it yields a large quantity of gas, of the highest illuminative power. The seam of cannel, altogether about 6 feet in thickness, is divided into four strata of coal, of different qualities, but all valuable as oil-yielding coals. These are—above, a kind of coal-shale, highly bituminous, and yielding, when distilled at a low temperature, from 32 to 35 gallons of crude oil per ton; below that, what is called the smooth cannel, yielding 40 to 45 gallons of crude oil per ton, and a coke of very peculiar and valuable quality, resembling the charcoal from very hard wood: next in the series—what is looked upon as the most valuable of all the strata—the Curly coal, so called, on account of its remarkable twisted fracture, which yields 75 to 80 gallons of oil per ton; and lastly, what is known as bottom cannel,—very similar in character to the smooth cannel above, excepting that the coke is of inferior quality. These four strata make up the entire seam of the cannel, which lies at about 200 yards below the surface, upon a stratum of good ironstone, with fire-clay. The discovery of this coal was a fortunate circumstance in relation to the manufacture of mineral oils: before this discovery, the only indigenous substance largely used was the Boghead coal; and, as the contracts for that coal were in few hands, the manufacture of the oils was, irrespective of Young's patent, almost a monopoly. The discovery of the Flintshire cannel has altered all this; and, although the supply of coal is, and probably will remain, limited, it has nevertheless opened the trade, and so far broken down the monopoly, to the advantage of the trade at large, and also of the public, who are the consumers. The mineral oils which are obtained both from the Boghead coal and the Flintshire cannel are of the kind known as paraffin oils, and differ entirely in their chemical constitution from the oils which are produced by the distillation of common bituminous coal or coal tar. Their leading feature is, that they contain the peculiar crystalline substance called paraffin, now employed as a substitute for sperm in candle-making, with which they are identical in composition, although differing from it in physical structure. The manufacture of these oils is now a great established branch of industry, employing large capital and a great amount of business energy. The discovery of the liquid petroleum of North America had, at one time, apparently placed the trade in the hands of the Americans, but extended experience has shown that the oils can be produced at a cheaper rate from our own coals, provided a supply of the latter, of the proper quality, can be obtained. This problem the discovery of the Flintshire cannel has favourably solved so far; and there can be little doubt that the commercial enterprise which it has directed into the district will succeed in keeping us independent of foreign supplies, to that extent which is necessary to the maintenance of the trade in state of wholesome freedom from the trammels which a close market never fails to impose.—*Newton's London Journal of Arts.*

CLEVELAND IRON.—Considerable changes have been made in the works of Messrs. Bolckow and Vaughan, at Middlesbrough, under the direction of the new company; and though they are not so busy at present as before the commencement of the new year, from the fact of one or two large contracts having been obtained recently, it is probable that they will again resume their full amount of work. At Consett, work is also on a less scale, but at the other ironworks there is little difference. At the same time the new rolling mills at North and South Stockton, and the malleable ironworks at the former place, are being expedited. Mr. Samuelson, also, is now going forward with the fourth new furnace at Newport. It is evident that the present dulness at certain places, and comparative low prices, are not expected by a considerable number of persons in the trade to be likely to have long continuance.—*Darlington and Stockton Times.*

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending February 12 was 9782*l*. 1s. 2d.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 27th instant, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to supply— PIG IRON.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 27th day of February, 1865, after which hour no tender will be received. GERALD C. TALBOT, Director-General.

India Office, February 15, 1865. 58

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 27th instant, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to supply— COPPER SLIPS; also COPPER ROD, TILE, and SHEET.

And that the conditions of the said contracts (two in number) may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 27th day of February, 1865, after which hour no tender will be received. GERALD C. TALBOT, Director-General.

India Office, February 18, 1865. 59

MINE AGENT WANTED.—WANTED, a NIGHT and DAY AGENT for WHEAL SETON MINE. Salary, 8 guineas per month.—Applications, with testimonials, to be forwarded on or before the 22d inst., to T. HARRY TILLY. Falmouth, February 14, 1865. 60

WANTED, a MANAGER for an EXTENSIVE SLATE QUARRY, recently opened, in NORTH WALES, and from which considerable sales are expected to be henceforth made. There is an excellent house close to the works.—Apply, stating full particulars as to capabilities, references, and salary required, to "A. B.," 26, Lincoln's Inn-fields.—February 11, 1865. 61

PARTNERSHIP, £60,000.—The ADVERTISER WISHES to MEET with a FEW GENTLEMEN WILLING to JOIN HIM in the MANUFACTURE of TWO ARTICLES, both of which are extensively used, and in the manufacture of which good profits may be made. It is proposed to limit the responsibility of each shareholder to £2000 per share. References given and required.—Address, "C. A.," MINING JOURNAL office, 26, Fleet-street, London, E.C. 62

FIFTY LOUIS D'OR PREMIUM for INFORMATION as to the BEST MARKET for a VALUABLE BOG IRON ORE or OCHRE (by preference wholesale and in the crude state), giving the following analysis:—

		Calculated as dry.
Peroxide of iron	68·5	88·75
Silica	8·0	6·25
Moisture	23·5	Alumina 5·00
Total	100·0	100 00

Address, "A. P.," Mr. E. Schlotte, Bremen, Germany. 63

FIFTY POUNDS PREMIUM will be PAID to ANYONE who can GIVE PRACTICAL INFORMATION, and can UNDERTAKE the ERECTION of LIME KILNS, in which crade brittle chalk or gypsum (kreideerde), containing 96 per cent. of oxide of calcium, may be burnt into lime in the simplest, quickest, cheapest, and most regular manner. Also whether it is requisite to form the chalk into bricks, and to bake and dry them before burning them; and if gas kilns connected by flues, similar to circular kilns, are the most practicable for that purpose. Also whether from this chalk, with an addition (and how much) of clay, the best Portland cement can be made, and if this chalk is exported in its raw state to the Continent, particularly to the Elbe districts, for the manufacture of cement, and what is the price free on board at an English port. Lastly, whether beneath the chalk beds salt or any other useful mineral is found.—Address, "St. K.," Mr. E. Schlotte, Bremen, Germany. 64

EXCELLENT OPPORTUNITY—JAMES'S COMPRESSED AIR ENGINE.—In consequence of advanced age and indifferent health, Mr. W. H. JAMES is ANXIOUS to MEET with an enterprising PARTY with capital to TAKE the ACTIVE PART in the DEVELOPMENT of the ABOVE, and SEVERAL OTHER very IMPORTANT INVENTIONS, who will be liberally treated with. Principals only (stating capital at command) are requested in the first instance to address Mr. W. H. JAMES, C.E., 844, Old Kent-road, London, S.E. 65

NOTICE—WEST POLMEAR MINE, IN THE PARISH OF ST. AUSTELL.—ALL PERSONS HAVING CLAIMS on this mine will be pleased to SEND the PARTICULARS thereof to the purser, Mr. William Polkinghorne, Woodlands, Tywardreath; and ALL PERSONS INDEBTED to the company are REQUESTED to PAY what they owe to the said purser, without delay.

Dated February 13, 1865. 66

ADELAIDE LAND AND GOLD COMPANY.—Notice is hereby given, that the Liquidators will be PREPARED to PAY a FOURTH INSTALMENT of SIX SHILLINGS AND SIXPENCE PER SHARE on Monday, the 20th February inst., and two following days, between the hours of Eleven and Two o'clock, as under. HANCOCK, SHARP, AND HALES

25, Birchin-lane, London, Feb. 10, 1865. (Solicitors to the Liquidators).

N.B.—All shares must be produced at time of payment. 67

MONTES AUREOS (BRAZILIAN) GOLD MINING COMPANY (LIMITED).—Notice is hereby given, that the FIFTH ORDINARY GENERAL MEETING of shareholders will be HELD at the London Tavern, Bishopsgate street, in the City of London, on TUESDAY, the 28th of February, 1865, at Half-past Two o'clock precisely.

The share register of the company will be closed from Tuesday, 21st February, to Tuesday, 28th February, both days inclusive. By order of the Board,

38, Broad-street-buildings, Feb. 17, 1865. JUSTINIAN PELLY, Sec. 68

ENGLISH AND AUSTRALIAN COPPER COMPANY.—Notice is hereby given, that the ORDINARY GENERAL MEETING of the shareholders of this company will be HELD at the London Tavern, Bishopsgate-street, London, on THURSDAY, the 23d day of February inst., at Two o'clock in the afternoon, in pursuance of the Deed of Settlement. By order,

CHARLES B. ROGERS, Sec.

Offices, 6, Gracechurch-street, London, E.C., February 14, 1865.

N.B.—The transfer books will be closed on Thursday, the 23d inst., and be re-opened on Friday, the 10th proximo. 69

THE REINNIE LAXEY MINING COMPANY (LIMITED).—Capital £36,000, in 6000 shares of £6 each.

DIRECTORS.

F. HOUSMAN, Esq., 5, New-square, Lincoln's-inn.
ROBERT CURWEN, Esq., Director of the Snaefell Mining Company, Liverpool.
A. ROBINSON, Esq., Liverpool.
T. DOWLING, Esq., South Sea House.
F. W. BECKER, St. George's-terrace, Regent's-park-road.

LONDON MANAGER AND SECRETARY—Mr. Thomas Thompson, 12, Old Jewry Chambers.

BANKERS—The Imperial Bank, Lothbury.

Sept. 27, 1864.—The Reinnie Laxey sett adjoins that of the Great Laxey Mining Company on the entire line of its eastern boundary, and the mines are, in both cases, similarly situated, besides being the only insular mines yielding the three qualities of ores—lead, blende, and copper. Hitherto the most successful of our mines have been in connection with one or other of our two granite formations, one of which lies between the Great Laxey and Reinnie Laxey. The Great Laxey Mine is at the foot of the western slope of this granite range, and the Reinnie is similarly situate immediately on the opposite or eastern slope. Both mines are in the same order and condition of clay-slate, and no difference can be shown as to the more favourable situation of either section of ground, whether in reference to the important effects undoubtedly resulting from the granite range, or altogether for ample and successful mining operations. There are five lodes opened on the Reinnie Estate, all of which are intersected by cross-courses (in some instances by the same cross-courses) as in Great Laxey. For every one of these lodes rich ore has been taken, samples of which may be seen at the office. The existence of three of these lodes has only lately become known. No. 1 lode has been worked upon to a small extent, and the trial, as far as carried out, proves it to be regular, and of a decidedly ore-bearing character. This lode varies from 3 to 9 ft. in width, and has yielded lumps of purest ore, especially out of a new shaft already sunk 16 fms. On this shaft is erected one of the best constructed water-wheels, 50 ft. in diameter, thereby giving every facility for the sinking being instantly resumed. An adit has been brought up from the sea level 70 fms. below, and it is intended to carry down the shaft at once to that depth. The uniform opinion expressed by the most experienced and best of miners for many years past is, that from the present workings northward—where the ground steadily rises on the line of the lode for nearly a mile, terminating in what is held to be the most congenial granite formations—a heavy deposit of ore can scarcely fail to be found. No. 2 is a parallel lode to the No. 1, and contains lead ore, according to the sample. This lode is specially favourable for adit level operations, as, from the sea, one could immediately be taken up 100 fms. from the surface. No. 3 lode is also parallel to the two before named, and was discovered by the cutting of the newly-made high road from Laxey to Ramsey. The samples of ore form a part of the original discovery by the workmen on the road. It can also be worked, to an equal advantage with the last-named lode, from the sea level by an adit of equal depth. No. 4 lode appears to be a decided and regular copper-bearing lode, parallel to the Great Laxey lode, and is, in my opinion, as important an object as the sett contains. Its peculiarly favourable position and bearing, being at the base of the granite hill, and intersecting, as it does, all the other lodes in the sett, well be manifest by reference to the plan accompanying the prospectus. An adit level, 100 fms. deep, can also be brought in upon this lode. No. 5 consists, as far as already discovered, of a run of courses bearing about east and west, rich in jack or blende ores. These courses are in character precisely the same as those now so famous and so profitably worked in the Great Laxey Mine. At the head of this sett, and at a most important junction of the granite and clay-slate, there is a slide or cross-course known in the Great Laxey Mines as "Dumbells." This cross-course traverses the whole of the lodes in the sett, and whore a similar intersection has taken place (a short distance off) in the Great Laxey the largest deposits of ore have been found, and, at this moment, it forms the richest section of the mines. The whole sett contains all the elements of a similar success to that of Great Laxey, whilst a larger number of lodes, each ore bearing, has already been proved to exist, and the facilities for working the sett by adit level operations are beyond any comparison. Considering all things, there is not another sett having the same successful chance remaining on the island—certainly none yet discovered. 70

PUBLIC COMPANIES UNDER COMPANIES ACT, 1862.—The CITY REGISTRATION AGENCY is at No. 8, ROYAL EXCHANGE, where all forms and books required under this Act may be obtained. Designs, specimens of seals, and share plates, can be seen at the same address. 71

PUBLIC COMPANIES UNDER COMPANIES ACT, 1862.—The new form of account books, especially prepared for the above, may now be seen at the City Registration Agency, 8, Royal Exchange, where all forms and books required under this Act, as well as seals, share plates, &c., may be obtained. 72

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SWANSEA COPPER ORE WHARVES.
TO IMPORTERS OF FOREIGN COPPER, LEAD, AND CALAMINE ORE.
Swansea, July 1, 1864.

GENTLEMEN,—We beg to inform you that, in consequence of the retirement of Messrs. W. and J. M. Williams from the copper ore trade, which they have carried on here for so many years past, we have resolved to enter upon that business, and for which purpose we have secured most eligible wharves, on the west side of the North Float, where vessels drawing 20 ft. of water can get alongside at all times. These wharves are now covered in, the floors being made of concrete to prevent waste of the ore. A powerful steam crusher has lately been erected on the premises, and is now in working order.

The business we purpose carrying on is that of COPPER ORE WHARFINGERS, combined with metal and other general agencies, which will be managed by our Mr. Thomas Eiford, who for 20 years has filled an important situation under Messrs. Williams, Foster, and Co., and for the last eight years has had the entire management of their large copper smelting works, and copper and metal rolling mills, in this locality, as well as the copper ore business of Messrs. W. and J. M. Williams, which we trust will be a sufficient guarantee to our friends that any business they may entrust to our care will be conducted with the most scrupulous attention to secure the best results for their interests.

In consequence of the large number of very extensive Copper smelting works concentrated in this immediate locality, this market affords greater competition for ore than perhaps any other in the world, there being now no less than sixteen distinct Companies competing for ores sold at the public ticketing, every two or three weeks. There is also a good demand for lead and zinc, or calamine ores, several large lead and spelter works having been established in this district for some time past, and new ones are in course of erection.

Soliciting a share of your consignments of ore, regulus, and slab copper to this port as well as a share of any general business you may have to transact in this quarter,

We remain, Gentlemen, your obedient servants,
ELFORD, WILLIAMS, AND CO.

REFERENCES:—Messrs. Williams, Foster, and Co., London and Liverpool; Messrs Williams, Harvey, and Co., London and Liverpool; the Glamorganshire Banking Company, Swansea; Messrs. Alex. Bell and Sons, No. 8, Finch-lane, London; Mons. Armand de Lacombe, Madrid.

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By JOHN BOWER, Esq., D.C.L., Barrister-at-Law, Managing Director of the Snowdon Hall Quarries Company (Limited).
London: Published at the MINING JOURNAL office, 26, Fleet-street, E.C., and sold by all booksellers and newsagents.

Will be published on the 12th inst.,

RAILWAY REFORM: ITS IMPORTANCE AND PRACTICABILITY CONSIDERED AS AFFECTING THE NATION, THE SHAREHOLDERS, AND THE GOVERNMENT, with a COPIOUS APPENDIX, containing a Popular History of the Rise, Progress, and Contemplated Completion of our Railway System, and other interesting matter. By WILLIAM GALT.
London: Longman and Co., Paternoster-row.

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Messrs. CASSELL, PETTER, and GALPIN beg to announce that they will publish, on the 1st of March, No. 1 of a new monthly first-class serial, to be entitled

THE SCIENTIFIC REVIEW, AND JOURNAL OF THE INVENTORS' INSTITUTE.

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The "SCIENTIFIC REVIEW, AND JOURNAL OF THE INVENTORS' INSTITUTE" will also form a medium of intercommunication between scientific men throughout the world; and an opportunity will be afforded them of canvassing the merits of rival inventions, provided the public good is the sole object of disputation.

It will, moreover, be the accredited organ of the Inventors' Institute, the objects of which are:—"To protect inventors' interests, and defend the privilege of obtaining Her Majesty's Letters Patent"—"To promote improvements in the Patent Laws"—"To facilitate the diffusion of information with reference to inventions, and other subjects beneficial to inventors and patentees."

Each number will generally contain one or more reviews of scientific works; descriptions of new or improved machines, processes and apparatus, with illustrations when considered necessary; special articles on scientific topics of current interest; a *resumé* of the progress of manufactures and practical science in all parts of the world, collected from materials furnished by special correspondents, or from the most recent scientific periodicals, &c., whether at home or abroad; a detail of important patents asked for or secured; meetings of scientific societies; and answers to correspondents. Inventors and others seeking information may rest assured that their communications will receive early attention, whenever the questions proposed are of public interest.

The "SCIENTIFIC REVIEW, AND JOURNAL OF THE INVENTORS' INSTITUTE" will be edited under the supervision of able and experienced men, and will be published on the 1st of every month, price 6d., or stamped 7d.

Subscribers desirous of receiving copies each month at their residences will secure their delivery post free by remitting a year's subscription of 7s. to the publishers.

All communications intended for the Editors to be addressed as follows:—The Editors of the "SCIENTIFIC REVIEW," Messrs. CASSELL, PETTER and GALPIN, La Belle Sauvage-yard, London, E.C.—La Belle Sauvage-yard, London, E.C., February, 1865.

N.B.—Advertisements for the first number must be sent to the office of the "SCIENTIFIC REVIEW," La Belle Sauvage-yard, Ludgate-hill, on or before the 20th February.

Now ready, price 2s. 6d., by post 32 penny stamps,

MR. HOPTON'S NEW WORK, entitled CONVERSATIONS ON MINES, &c., BETWEEN "A FATHER AND SON." Thirteen plans on ventilation and working out coal, dialling, planning, and taking the dip and rise of the mine illustrated.

Near 900 copies are ordered in Wigan alone.

Address Mr. J. J. CAMPBELL, Cropper's-hill, St. Helen's; or the author, 73, Peter-street, St. Helen's.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the BULLER AND BASSET UNITED MINING COMPANY.—TO BE SOLD, BY AUCTION, at the BULLER AND BASSET UNITED MINE, situate in the parish of Redruth, in the county of Cornwall, under the direction of the Registrar of the said Court, on Monday, the 6th day of March next, at Eleven o'clock in the forenoon, subject to such conditions as will be then and there produced, the undermentioned MINING MACHINERY, either together or in lots, viz.:—

ONE 30 in. cylinder PUMPING ENGINE, 8 ft. stroke in cylinder, 7 ft. in shaft.
ONE BOILER, 10 tons. ONE BOILER, 8 tons.
20 fms. 9 ft. 12 in. pumps, 27 fms. 9 ft. 11 in. pumps, 12 fms. 9 ft. 11 in. pumps, 13 fms. 9 ft. 10 in. pumps, and other pumps; 90 fms. 8 in. rods, balance-bobs, iron stave ladders and rods, 1 16 in. cylinder eccentric steam whim and wood house, horse whim, tram wagons, smiths' bellows, wheelbarrows, miners' chests, account-house furniture.

The mine and materials may be inspected at any time prior to the sale, on application to the officer in charge thereof; and further particulars may be obtained of

Messrs. HODGE, HOCKIN, AND MARRACK, Truro
(Solicitors for the Petitioner).

Dated Registrar's Office, Truro, February 15, 1865.

In Chancery.

TO BE SOLD, pursuant to a Decree of the High Court of Chancery made in a Cause Brown *v.* Spittle, with the approbation of the Master of the Rolls, in four lots, by Mr. THOMAS RICHARDS, the person appointed by the Judge, at the Swan Hotel, Wolverhampton, Staffordshire, on Wednesday, the 22d day of February, 1865, at Five o'clock in the afternoon precisely, certain FREEHOLD, COPYHOLD, and LEASEHOLD ESTATES, being the ROSE HILL COLLIERY and the ROSE HILL BRICKYARD, with several DWELLING HOUSES thereon or adjacent thereto, situate at Rose Hill, in the township of Willenhall, in the county of Stafford, and now in the occupation of Messrs. Brown and Spittle, and their undertenants.

Particulars whereof, with plans and conditions annexed, may be had of E. B. DIMMACK, Esq., Parkfield Works, Wolverhampton; Mr. CHARLES GALLIMORE BROWN, Bilston; Mr. NEEDHAM, 1, New Inn, Strand, London; Mr. E. M. ELDERTON, 3, Pump-court, Temple, London; at the Swan Hotel; and of the Auctioneer, at Wolverhampton; and the surface of the premises, and the plant and stock, may be viewed on application to Mr. WILLIAM FELLOWS, manager at the works.

VALUABLE BEDS OF COAL AND IRONSTONE, IN LIVERSEDGE, IN THE PARISH OF BIRSTAL, IN THE COUNTY OF YORK.

MESSRS. HARDWICKS AND BEST WILL SELL, BY AUCTION (unless previously disposed of private contract, of which due notice will be given), at the Talbot Hotel, in Bradford, on Thursday, the 23d day of February, 1865, at Six o'clock in the evening for Seven punctually, subject to such conditions as will be then produced and read,

All the supposed BEDS or SEAMS of COAL and IRONSTONE still ungotten, viz.:—The Lousy Bed, Stone Coal, the Low Moor Black Bed and Ironstone, and the Better Bed, with all others there may be lying under Bay Farm, in Liversedge, in the county of York, which farm contains by admeasurement 22 A. 2 R. 16 P. or thereabouts.

The purchaser will have the option of re-opening the shaft, from which two other beds of coal—viz., the Mucky Bed and the Blocken Bed—have been already got.

The above beds run through an extensive surrounding mineral district, principally unsold, and an opening is thus afforded for commencing a large undertaking.

For further particulars apply to Mr. J. D. BUTLER, surveyor, Cleckheaton; or at our offices. TAYLOR, JEFFERY, AND LITTLE, Solicitors,
February 8, 1865. 5, Piccadilly, Bradford.

THREE LOCOMOTIVE ENGINES (one new in 1862) CONTRACTORS' PLANT AND IMPLEMENTS, PLAISTOW.

MESSRS. FULLER AND HORSEY are instructed to SELL BY AUCTION, on Tuesday, February 28, 1865, at Twelve precisely, at the works, Plaistow, THREE LOCOMOTIVE ENGINES and CONTRACTORS' PLANT and IMPLEMENTS used in the construction of the Northern Outfall Sewer, including—

ONE TANK LOCOMOTIVE, by Manning and Wardle, Leeds, with six wheels coupled, 3 ft. 3 in. diameter, 11 in. cylinder (new in 1862, and but little used).
TWO TANK LOCOMOTIVES, by G. England and Co., 10 and 12 in. cylinders.
An England's traversing jack, 3 forges, quantity of pickaxes, pumps and various utensils, 4 carts, useful iron, wheel hoops, bolt iron, fence posts, quantity of wagons, timber erections of temporary workshops and stores, blacksmiths' shop, stables, &c. Also, 20 sets new 3 ft. 6 in. wheels (Owen's patent), made by the Rotherham Foundry Co.; 40 new axles, to suit 5 ft. 3 in. gauge; 80 Owen's patent solid new tyres, by the Rotherham Foundry Co., to fit 3 ft. and 3 ft. 6 in. wheels.

May be viewed the day preceding and morning of sale, when catalogues may be had on the premises, and of Messrs. FULLER and HORSEY, 13, Billiter-street, E.C.

CONTRACTORS' PLANT AND IMPLEMENTS, BARKING CREEK.

MESSRS. FULLER AND HORSEY are instructed to SELL, BY AUCTION, on Wednesday, March 1, at Twelve precisely, at the Northern Outfall Works, Barking Creek, CONTRACTORS' PLANT and IMPLEMENTS used in the construction of the Northern Level Sewer, comprising—

SIX HUNDRED TONS PERMANENT and TEMPORARY RAILS, and TEN THOUSAND SLEEPERS.
TWO HUNDRED capital EARTH WAGONS, side and end tips.
SIXTY-SIX IRON EARTH WAGONS.
FIFTY-SIX BRICK TRUCKS, TWENTY large SPRING TRUCKS.
FIVE IRON CONCRETE WAGONS,
Concrete and pug mills, 100 centres, 5 portable offices, the temporary erections of sheds, cottages, storehouse, and stables.
A 12 horse power HORIZONTAL STEAM ENGINE, egg-end BOILER, PAIR of 4 ft. 6 in. horizontal French burr stones, 10 wrought-iron gates, 13 pairs wheels and axles, quantity of wrought, cast, and scrap iron, granite and York stone, large quantity of timber, navvy barrows, and a variety of stores and utensils.
N.B.—Barges can load alongside.
A steam-boat will leave the Blackwall pier for Barking Creek, calling at North Woolwich, on the day of sale, and returning in the afternoon, for the accommodation of intending purchasers, at times that will be notified in the catalogue.
May be viewed Monday and Tuesday preceding and morning of sale, when catalogues may be had on the premises, and of Messrs. FULLER and HORSEY, 13, Billiter-street.

LEAD MINES, ENGINES, BOILERS, PITWORK, WINDMILL, CRUSHERS, AND OTHER MINING PLANT AND BUILDINGS FOR SALE.

MR. T. P. THOMAS has been instructed to offer FOR SALE, BY PUBLIC AUCTION, at Garraway's Coffee House, on Monday, the 6th day of March next, at Twelve o'clock noon, the mines known as the NEWTOWNARDS AND CONLIG LEAD MINES, together with all the PLANT and BUILDINGS thereon, which are to be taken at a valuation.

These mines are situated in the county of Down, Ireland, within two miles of the railway station at Newtownards, and about the same distance from the harbour at Bangor. They are held under leases from the Marquis of Londonderry and Robert Edward Ward, Esq., of Bangor Castle, respectively, and extend over very considerable tracts of country, large portions of which are yet unexplored. The workings are very extensive, and have yielded large quantities of ore, from which dividends have been paid to the present company amounting to over £26,000.

The mine is provided with TWO STEAM ENGINES, attached to one of which is a crusher, also a powerful windmill for crushing, suitable dwelling houses for agent and overseers, and a variety of plant, which is set forth in an inventory, a copy of which can be procured upon application to the auctioneer. The washing floors are in good order, and command an abundant supply of water.

The mine is at present being worked at and above the 120, above which bunches of of ore of considerable magnitude have been wrought, and ore is still raised monthly to an extent until very lately sufficient to meet current expenses. To explore and develope the lode longitudinally, making the present mine a basis from which to start trial levels, very well deserves the expenditure of a moderate amount of capital.

The present company having no power to make calls upon the shareholders is the cause of the mine being disposed of, as the requisite trials cannot be prosecuted without the aid of further capital.

Full particulars can be obtained upon application to the Auctioneer; to MARK B. NOBLE, Douglas, Isle of Man; to Capt. W. H. ROWE, Newtownards, who will show the mines; or to Mr. THOMAS THOMPSON, 12, Old Jewry Chambers, London.

THE DOLFRWYNOG AND HAVOD OWEN MINES.

MESSRS. GADSDEN AND ELLIS WILL SELL, BY AUCTION, at the Guildhall Coffee House, near the Guildhall, in the City of London, on Wednesday, March 15, 1865, at Twelve o'clock, the DOLFRWYNOG AND HAVOD OWEN MINES, in the parish of Llanfachreth, Merionethshire, six miles from Dolgelly, extending over about 326 acres, together with the costly MACHINERY and PLANT. The prospects of these mines are most favourable. Large quantities of copper ore have been raised, and ore containing a high percentage has been obtained. The assertions made by some of the most celebrated authorities of the day, that gold exists to a large extent, are it is believed fully borne out by the highly satisfactory results that adjoining mines are showing.

The mines are held on lease for 21 years, at rentals of £25 per annum each, or at a royalty of 1-15th, at lessor's option.

Particulars may be had at the hotels at Dolgelly; of Messrs. SUTTON and OMMANNEY, solicitors, 6, Basinghall-street; of WILLIAM BATTIE, Esq., 33, Great Winchester-street; at the Guildhall Coffee House; and of Messrs. GADSDEN and ELLIS, No, 18, Old Broad-street, London, E.C.

The VALUABLE MINING RIGHTS extending throughout the LANDS known by the name of NANT-Y-IAGO, in the parish of Llangurig, Montgomeryshire, containing 353 A. 2 R. 14 P., successfully worked for lead and blende ores, together with all the PLANT and MATERIALS.

MESSRS. GADSDEN AND ELLIS WILL SELL, BY AUCTION, at the Guildhall Coffee House, near the Guildhall, in the City of London, on Wednesday, March 15, 1865, at Twelve o'clock, the above promising MINE, held from Sir Watkin Williams Wynn, Bart., for 21 years, from December, 1859, at a royalty of 1-16th.

Particulars may be had of Messrs. BARNES and BERNARD, solicitors, 2, Great Winchester-street, City; of Captain JAMES ROACH, at the mine, and at Llanidloes; at the Guildhall Coffee House; and of Messrs. GADSDEN and ELLIS, No. 18, Old Broad-street.

VALUABLE COLLIERY PROPERTY, FOREST OF DEAN, GLOUCESTERSHIRE.

TO BE LET OR SOLD, BY PRIVATE CONTRACT, the NEW BRIDGE ENGINE COLLIERY, situate at NAILBRIDGE, in the FOREST OF DEAN, on the turnpike-road from Coleford to Mitchel Dean, comprising all the UNGOTTEN COAL in the COLEFORD HIGH DELPH SEAM and other veins, in an area of 90 acres, together with the PIT, SHAFTS, WINDING and PUMPING ENGINES, and other colliery erections and PLANT connected therewith.

The SPEEDWELL LEVEL AND PROSPER ON HARROW HILL COLLIERIES adjoining the New Bridge Engine Colliery, and close to the Coleford and Mitchel Dean turnpike-road.

The REDDINGS LEVEL COLLIERY, situated at RUARDEAN, comprising the UNGOTTEN COAL in the COLEFORD HIGH DELPH SEAM, in an area of 33 acres.

The STANDFAST COLLIERY, at MOSELY GREEN, comprising about 28 acres.

For further particulars, and to treat, apply to Messrs. ABBOT and LEONARD, solicitors, Bristol.

NOTICE.—The SALE of GURLYN MINE MATERIALS, as advertised, WILL NOT TAKE PLACE.
Helston, February 14, 1865. R. H. CADE, Auctioneer.

NOTICE TO MINING COMPANIES.—TO BE SOLD, THIRTY-FIVE ACRES of fine LAND, with capital MANSION, stabling, offices, walled garden, all in excellent order, well watered, handsomely planted, four miles from Dublin. A RICH VEIN of LEAD ORE discovered on this land; competent judges pronounce it of superior quality. Parliamentary title.—For terms, address, Mrs. LAYARD RIVERSDALE, Palmerstown, County Dublin.

TO CAPITALISTS AND SLATE MERCHANTS.

MR. T. JARMAN has to OFFER FOR SALE SHARES in a FIRST-CLASS SLATE QUARRY, making good returns of slate, of large size and best quality. Having a special report on the quarry, he strongly recommends these shares to merchants, to secure an early and constant supply of slate, and avoid the annoyance of a two years' stem (as at present at the Bangor Quarries), and also to share in the enormous profits obtained in the quarrying of slate [see T. C. Smith's work, price 1s., office of the MINING JOURNAL, London].

For copies of report, and particulars, address Mr. JARMAN, estate agent and quarry inspector, Emsworth, Hants.

FOR SALE, the RIGHT to the PATENT of a VALUABLE IMPROVEMENT in VALVES and BUCKETS for PUMPS, and in VALVES or COCKS for OTHER USES.—For particulars, apply to Mr. W. T. RAWLE, patent and mining agent, 39, Budge-street, Bristol.

WHEAL ANNA, ST. HILARY, NEAR MARAZION, CORNWALL.

FOR SALE, BY PRIVATE CONTRACT, the WHEAL ANNA MINE, with the MATERIALS thereon, situate in the parish of St. Hilary, near Marazion, Cornwall, adjoining the Great Wheal Prosper Mines.

The materials consist of a 70 in. cylinder PUMPING ENGINE, with THREE BOILERS complete.

36 in. cylinder PUMPING ENGINE, with ONE BOILER.
32 in. DOUBLE STAMPING ENGINE, 9 ft. stroke, with ONE BOILER, and 36 heads of stamps.
22 in. WINDING ENGINE, with BOILER and cage.
Capstans, shears, balance-bobs, capstan rope, a large number of 17 in., 16 in., and [illegible] pumps, with windbores, doorpieces, H pieces, plunger poles, working barrels, rod plates, caps, shaft roller, rod and flange bolts, rail iron, chain, ladders, whims, &c.; Brenton's calciner, with tin frames, trunks, buddies, &c.; smiths' and miners' tools, &c.

To view the same, apply to the agents, on the mine; and for further particulars to Mr. J. P. BENNETTS, Falmouth; or to Messrs. JOHN TAYLOR and SONS, 6, Queen-street-place, Upper Thames-street, London.—Nov. 1, 1864.

DEAN FOREST.

FOR SALE, an EXTENSIVE and VALUABLE HEMATITE IRON MINE, situated near CINDERFORD, in the FOREST OF DEAN. This mine is situated in the best part of the forest basin for richness and productiveness, the ores from which are known to yield in the smelting furnace upwards of 60 per cent. of iron, and which from its highly manufacturing properties is in great request, and always commands a ready sale in South Wales and Staffordshire. The South Wales Railway runs through the property, forming a convenient communication with the above district.—For all particulars, and to treat, apply to Mr. H. D. HOSKOLD, mining engineer, Cinderford, Gloucestershire.

HOLMBUSH MINES—SALE OF ENGINES, &c.

TO BE SOLD, BY PRIVATE CONTRACT, ONE 80 in. cylinder PUMPING ENGINE, 11 ft. stroke in cylinder, 9 ft. in shaft, air pump (brass lined), with THREE BOILERS about 12 tons each. ONE 18 in. WINDING ENGINE, 3½ ft. stroke, with cage, and 8 tons BOILER. ONE 16 in. WINDING ENGINE, with oscillating beam, cage, and BOILER 6 tons.—For further information, apply to Mr. WARD, 9, Broad-street-buildings, London; Capt. JOHNS, West Caradon Mine, Liskeard; or to Mr. THOMAS PRYOR, Claremont, Redruth.

LEICESTERSHIRE.

TO BE SOLD, the RIGHT of WORKING the COALS and OTHER MINERALS lying under a portion (being 47 A. 2 R. 35 P.) of IBSTOCK GRANGE ESTATE, in the above county.

The lands under which the coals and other minerals lie are within a short distance of Ibstock Colliery, comprise the same seams of coal, being five in number, ranging from 2 ft. 9 in. to 8 ft. in thickness, and are about the same depth from surface.

The district presents unmistakeable evidence of a coal field capable of being extensively and profitably worked.

Ibstock Grange is situate 13 miles from Leicester, 13 from Ashby-de-la-Zouch, 5 from Market Bosworth, and 1¼ from Bayworth station, on the Leicester and Burton branch of the Midland Railway.

For further particulars, and to treat for same, apply to Messrs. BURD and SONS, estate agents, Shrewsbury.

PROFITABLE COLLIERY INVESTMENT.—TO BE SOLD, for £8000, a COLLIERY, with PLANT, &c., in good working order. The output is steadily increasing, and will speedily reach 150 tons per day. The coal is on the Admiralty list, and of the best quality of Welsh steam coal, and a profit of 2s. per ton can be calculated upon.—Address, "A. B.," 14, Portland-square, Bristol.

MERIONETHSHIRE, NORTH WALES.

TO BE DISPOSED OF, a SLATE QUARRY PROPERTY, vein proved, and position commanding all advantages. Also, a VALUABLE GRANT, possessing a RICH SILVER-LEAD MINE, with other lodes, very favourable.—To treat for the same, apply to Mr. H. P. M. OWEN, C.E., Penrhyndendraeth, via Carnarvon.

Mr. OWEN has OTHER MINES and QUARRIES TO DISPOSE OF. Also, begs to offer his services to gentlemen in all inspections of native mineral, with practical reports thereon. Immediate attention given.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place Laurence Pountney-hill Cannon-street E.C.

ENGINE AND BOILER FOR SALE.—A BOULTON AND WATT 40 horse power LOW PRESSURE BEAM ENGINE FOR SALE. Also, a CORNISH WROUGHT IRON BOILER, in capital repair, by Hill and Sons. The principal dimensions of the engine are 24 in. cylinder, 5 ft. stroke, 16 ft. fly-wheel. The boiler is 22 ft. long, 8 ft. diameter, with double tubes. The engine and boiler may be seen at work any day before the 31st of March. Can be delivered before the 30th April next on the ground, or the purchaser may make other arrangements for taking down engine after stopping working. Price for engine and boiler, £300.

For view, or other particulars, apply to Messrs. STANTON and SON, Stafford Mills, Stroud, Gloucestershire.

A GREAT DEAL of INFERIOR SPIEGELEISEN having been SOLD in ENGLAND, to the PREJUDICE of the GENUINE ARTICLE, I beg to OFFER BEST QUALITY of SPIEGEL IRON, ex steamer in Hull, at £6 10s. per ton. SECOND QUALITY, £5 5s. Also, PUDDLED STEEL in BARS, ordinary sizes, £13 per ton. Apply to JULIUS GOLDSTEIN, HAMBURG.

Engineers, also merchants and manufacturers in the metal trade, wishing to be represented in Hamburg, will please communicate.

MANCHESTER, AND WEST END OF LONDON.

MR. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER,
ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER; and 31, REGENT STREET, LONDON, S.W.
INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices.
A Monthly Investment Circular on application.

MINING OFFICES, MANCHESTER.

THOMAS MOLYNEUX AND CO., MINE AGENTS, SHAREBROKERS, AND GENERAL COMMISSION AGENTS. Reliable information can be obtained as to purchase and sale of shares.

Office of the Hazel Grove Silver-Lead Mining Company (Limited), Flintshire. Prospectuses, reports, &c., of this valuable property may be had on application to No. 28 Princess-street, Manchester.

BRITISH AND FOREIGN INVESTMENT.—MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION of BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS of BRITISH and FOREIGN STOCK.

Mr. SPARGO has for sale shares in English mines paying from 10 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.

Mr. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will at all times give the best advice as to investment in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

Mr. SPARGO has published the following works, viz.:—

Statistics and Observations upon the Mines of Cornwall,		1859, price 2s. 6d.
Ditto	ditto	1860, price 2s. 6d.
Ditto	ditto	1862, price 5s.
Ditto	ditto	1864, price 5s.

Physical, Geological, and Parish Map of Cornwall. Scale, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers.

Geological maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses by which it is traversed. Price 2s. 6d. each.

A Model, or Relief, map of Cornwall (6 ft. 6 in. by 5 ft.), presenting the names of every town and village, as also every characteristic point of the county. Price £5 5s.

Dividends received, calls paid, and all orders promptly negociated.
Commission 1¼ per cent.

Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.

Mr. SPARGO's Statistics for 1865 will soon be published.

Bankers: Bank of London, and the Metropolitan and Provincial Bank (Limited.)

GOVERNMENT SECURITIES, JOINT-STOCK BANKS, RAILWAY DEBENTURES AND BONDS, COLONIAL SECURITIES, FOREIGN BONDS, AND BRITISH MINES.—Messrs. TREDINNICK AND CO., of 78, LOMBARD STREET, LONDON, E.C., may be consulted confidentially as to the eligibility of all *bond fide* investments. A selected list forwarded on application.

CLAYTON, SHUTTLEWORTH, AND CO.,
ENGINEERS,
MANUFACTURERS of PORTABLE and FIXED STEAM ENGINES, MACHINERY for PUMPING, HOISTING, GRINDING, SAWING, &c., ENGINES for STEAM CULTIVATION, SELF MOVING ENGINES for COMMON ROADS and AGRICULTURAL PURPOSES GENERALLY.
STAMP END WORKS, LINCOLN; and
76, LOMBARD STREET, LONDON.
ALSO AT
LOWENGASSE No. 44, LANDSTRASTE, VIENNA, and GEGENUBER DEM BAHNHOF, PESTH.
Descriptive, illustrated, and priced catalogues free per post.
SPECIAL DRAWINGS WHEN REQUIRED.
THE BEST STEAM THRASHING MACHINERY MADE. 110

PATENT FLEXIBLE TUBING,
AND BRATTICE CLOTH FOR MINES,
MANUFACTURED BY
ELLIS LEVER,
PATENTEE,
WEST GORTON WORKS, MANCHESTER. 111

ISAAC FRANCIS, NANT, WREXHAM, a dresser of 30 years experience, is OPEN TO INSPECT ANY DRESSING PLACE on moderate terms. MR. FRANCIS can introduce PLANS of IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing floors. 112

IMPROVED APPLICATION OF WATER-POWER.

THE TURBINE.—MAC ADAM BROTHERS AND CO., ENGINEERS, SOHO FOUNDRY, BELFAST, have been engaged for 12 years, with complete success, in MANUFACTURING their IMPROVED TURBINES, and can recommend them with confidence.
This machine is applicable to all practicable heights of fall and quantities of water, giving a much higher percentage of power than any other description of water-wheels.
On low falls it has the additional advantage of not being affected by floods or back-water, and it is particularly well adapted for any falls where the quantity of water is variable.
Particulars on application, also references to turbines now at work on a great variety of falls. 113

FRANCIS'S SLACK WASHING MACHINE,
SIMPLE, and THOROUGHLY EFFICIENT, REQUIRES NO STEAM ENGINE. Will wash brass from the puddling-furnace. Price £25.—Apply to Mr. R. C. RAWLINS, Wynn Hall Colliery, Ruabon. 114

Prize Medal Awarded Great Exhibition, 1851, and International Exhibition, 1862.

PATENT SAFETY FUZE WORKS, TUCKINGMILL, CORNWALL.—We beg respectfully to inform the public that since the decease of the late MR. THOMAS DAVEY this firm has consisted of JOHN SOLOMON BICKFORD, GEORGE SMITH, FRANCIS PRYOR, SIMON DAVEY, and WILLIAM BICKFORD SMITH. We are requested that all letters may be addressed, and all cheques and drafts made payable to us, as
BICKFORD, SMITH, AND CO. 115

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE. 116

ASSAYS AND ANALYSES.—MR. JOSEPH GREEN, for the past 14 years professional assayer to the Chester Goldsmiths' Company, UNDERTAKES the ASSAYING and ANALYSIS of EVERY DESCRIPTION of MINERAL.—Assay Office, Chester. 117

Gun Cotton Manufactory.

MESSRS. THOMAS PRENTICE AND CO.,
GREAT EASTERN CHEMICAL WORKS, STOWMARKET, SUFFOLK.
This manufactory has been established for the purpose of preparing GUN COTTON, according to the Austrian process, and was opened on the 26th of January last, under the inspection of Baron Lenk. Messrs. Thomas Prentice and Co. are now able to SUPPLY GUN COTTON, in its most approved form, either for the purposes of engineering and mining, or for military and submarine explosion, and for the service of artillery, as a substitute for gunpowder.
The advantages of Baron Lenk's GUN COTTON are the following:—
FOR PURPOSES OF ARTILLERY.—The same initial velocity of the projectile can be obtained by a charge of gun cotton one-fourth of the weight of gunpowder. There is no smoke from the explosion of gun cotton; it does not foul the gun, nor heat it to the injurious degree of gunpowder. There is much smaller recoil of the gun. The same initial velocity of projectile is produced, with a shorter length of barrel. In projectiles of the nature of explosive shells it breaks the shell more equally into much more numerous pieces than gunpowder. When used in shells, one-third the weight of gun cotton produces double the explosive force of gunpowder.
FOR CIVIL ENGINEERING AND MINING.—In driving tunnels through hard rock a charge of gun cotton of given size exerts double the explosive force of gunpowder, thus a smaller number of holes is necessary. It may be so used as, in its explosion, to reduce the rock to much smaller pieces than gunpowder, and so facilitate its removal. As gun cotton produces no smoke, the work can proceed much more rapidly, and with less injury to the health of the miners. In working coal mines the advantages of bringing down much larger quantities of material with a given charge, and the absence of smoke in the explosion, enable a much greater quantity of work to be done in a given time at a given cost. The weight of gun cotton required to produce a given effect in mining is only one-sixth part of the weight of gunpowder. In blasting rock under water the wider range and greater force of a given charge is a great element in cheapening the cost of submarine work. The peculiar local action of gun cotton, to which the effects of gunpowder show no analogy, enables the engineer to destroy and remove submarine stones and rocks, without the preliminary delay and expense of boring chambers for the charge.
FOR MILITARY ENGINEERING.—The facility of transport is increased, the weight of gun cotton being one-sixth that of gunpowder. The peculiar localised action of gun cotton facilitates the destruction of bridges and palisades, and every obstacle. For submarine explosion, gun cotton has the advantage of a much wider range of destructive power than gunpowder. For the same purpose gun cotton, from its lightness, has the advantage of keeping afloat the water-tight case in which it is contained, while gunpowder sinks it to the bottom.
FOR NAVAL WARFARE.—In the batteries of ships, between decks, and in casemated forts, the absence of smoke facilitates continuous rapid firing. The absence of fouling and of heating are equally advantageous for naval as for military artillery.
GENERAL ADVANTAGES.—Time, damp, and exposure do not alter the qualities of the present gun cotton. It has already been preserved 10 years without injury or decay. It can be transported through fire without danger, simply by being wetted, and when dried in the open air it becomes as good as before. In the case of a ship, or a fortress, or a city being on fire, this quality may be of the greatest value. It is much safer than gunpowder, owing to its being manufactured in the shape of rope or yarn. It cannot escape from its package, or be spilled by accident. The patent gun cotton is entirely free from the danger of spontaneous combustion, and secures that degree of safety and certainty which, at the time of the original invention, the gun cotton of Schönbein did not possess.
Messrs. THOMAS PRENTICE and Co. are now in a position to contract with the owners of mines, engineers, contractors, and governments for gun cotton prepared in the various forms required for their use. Mining charges will be supplied in the rope form, according to the diameters of bore required, and gun cotton match-line, as well as instructions for using it in mines, will be supplied with it.
The great advantage of gun cotton make its use in practice very much cheaper than its comparative price would appear to show; in blasting rock, for example, the rapidity and quantity of the work done, with a given expense of wages, &c., is largely in favour of gun cotton.
Messrs. THOMAS PRENTICE and Co. are also prepared to manufacture the gun cotton, and deliver it in the form of gun cartridges, adapted to every description of ammunition; all they require for this purpose being a drawing of the gun, gunpowder cartridges, and ammunition, with the specification of weights, sizes, and initial velocities.
Artillerists who prefer to manufacture their own cartridges may make special arrangements with the patentee through Messrs. PRENTICE and Co.
Stowmarket, March 10 1864. 118

BASTIER'S PATENT CHAIN PUMP,
APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.
J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects [illegible] and the public in general, to his new pump, the cheapest and most efficient ever [illegible] to public notice. The principle of this new pump is simple and effective, and [illegible] so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion.
The following statement presents some of the results obtained by this hydraulic machine, as fully demonstrated by use:—
1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus, sand, mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.
BASTIER'S PATENT CHAIN-PUMP may be seen daily in operation at Messrs. SAMUEL BERGER AND Co.'s Patent Rice Starch Works, Bromley-by-Bow, London, E. Cards of admission to be had on application to the inventor and patentee, Mr. J. U. BASTIER, C.E., 12, Gower-street North, London.
J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors, and others, for the USE of his INVENTION.
OFFICES, 12, GOWER STREET NORTH, LONDON.
London, March 21, 1859. Hours from Ten till Four. J. U. BASTIER C.E. 119

TO THE HARDWARE TRADE.
BRYLAND'S IRON TRADE CIRCULAR is now the leading journal of the trade. Supplied to subscribers only.

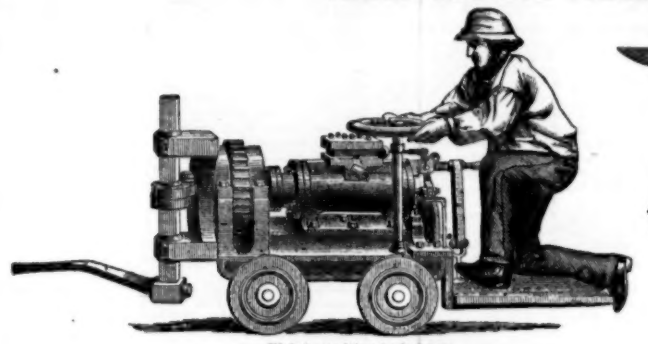
One year	£2 2 0
Half a year	1 1 0
Quarter of a year	0 10 6

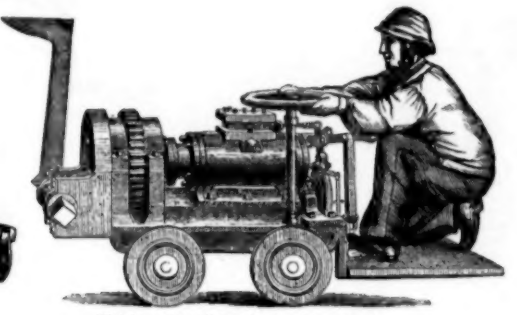
Payable in advance.
Office for advertisements, Union-passage, Birmingham. 120

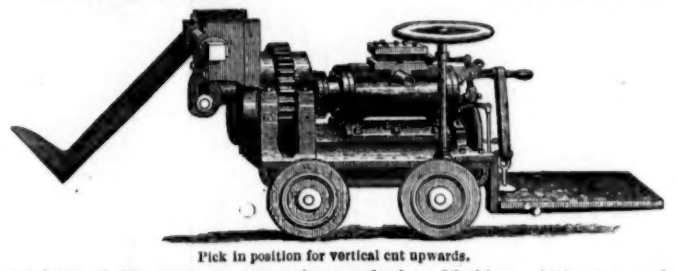
THE STOCKTON AND HARTLEPOOL MERCURY AND MIDDLESBOROUGH NEWS (published at Hartlepool) is eminently the organ of the Coal, Iron, and Iron Ship-building Trades in the extensive Mining and Maritime District of South Durham and Cleveland, with which it has been closely identified since its origin. The "Mercury" was for years the only newspaper published in South Durham and Cleveland" and is yet the only one published more than once a week. Advertisements to be forwarded to the publisher, Mr. JOHN H. BELL, Southgate, Hartlepool. 121

COAL CUTTING MACHINERY.

JAMES GRAFTON JONES'S PATENT.


Pick in position for holeing.


Pick in position for vertical cut downwards.


Pick in position for vertical cut upwards.

Messrs. JONES and LEVICK, proprietors of this patent, are prepared to supply these Machines, which are on an improved principle, and are constructed to work the coal at any angle from the horizontal to the vertical, thus rendering them capable of "holeing" at any angle, and of driving "headings." They are simple and substantial in construction, and are not likely to get out of order. They are already successfully employed in the Barnsley coal district, and are being introduced into the South Wales and other coal mining districts. They are also suitable for mining the argillaceous ironstones of the coal measures, as well as working other mines and quarries.

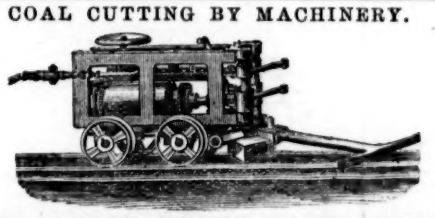
N.B.—Air Compressing Machinery will be supplied, or plans and specifications furnished. 128

Applications to be made to Messrs. FREDERICK LEVICK and Co., 4, Charlotte-row, Mansion House, London; or Messrs. LEVICK and SIMPSON, Blaina Ironworks, near Newport, Monmouthshire.

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.
The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.
All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds. 122

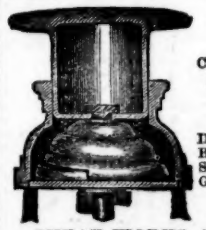
NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

COAL CUTTING BY MACHINERY.



MESSRS. RIDLEY AND CO. have, by recently PATENTED IMPROVEMENTS, COMPLETED their TRUNK COAL CUTTING MACHINE, WORKED by COMPRESSED AIR, and are NOW PREPARED to NEGOCIATE for the USE, and to SUPPLY MACHINES, which will be found to COMBINE SIMPLICITY of CONSTRUCTION with PORTABILITY and ECONOMY in WORKING. By the use of these machines a CONSIDERABLE SAVING of COAL is EFFECTED, and the COST of LABOUR MUCH REDUCED. Each machine will be guaranteed as to its capabilities, &c. 123
All applications to be made to Messrs. RIDLEY and Co., No. 11, South-street, Finsbury London, E.C.; or MR. PERCY BANKART, agent, 9, Clement's-lane, E.C.
*** COLLIERY PROPRIETORS are CAUTIONED against PURCHASING or USING MACHINES, the construction of which will constitute an INFRINGEMENT of the ABOVE PATENT.

THOMAS TURTON AND SONS,
MANUFACTURERS OF
CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS of EVERY DESCRIPTION.



DOUBLE SHEAR STEEL, BLISTER STEEL, SPRING STEEL, GERMAN STEEL.	FILES MARKED T. TURTON. EDGE TOOLS MARKED WM. GREAVES & SON

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.
SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.
Where the largest stock in the world may be selected from. 124

MESSRS. W. EASSIE AND CO.,
RAILWAY SAW MILLS, MOULDING SHOPS, &c., AND GENERAL TIMBER CONVERTING YARDS,
HIGH ORCHARD, GLOUCESTER.
Are PREPARED to FURNISH QUOTATIONS for any description of WOOD FITTINGS for home or foreign RAILWAY STATIONS, BARRACKS, EXHIBITIONS, DWELLINGS, WAREHOUSES, FACTORIES, STORES, GLASS HOUSES, &c.
They will also CONTRACT for WOODEN FITTINGS of ANY KIND in CONNECTION with IRON BUILDINGS, &c.
The above would in all cases be consigned ready fitted, so as to ensure speedy re-erection.
Numerous drawings of works of the above nature, already executed, can be seen on application, and references permitted to the engineers thereof.

The above Firm supply Barrows, Carts, Wagons, temporary Huts, permanent Shedding, and every description of Miners' and Contractors' Tools, at the very lowest prices. References can be given where many thousands of the above have been supplied to different parts of the world. Prices quoted on application. Delivered to any station, or home or foreign port. 125

Swan Rope Works.

GARNOCK, BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL,
MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA RORE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER, and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH. 126

First Class Silver Medal, Royal Polytechnic Society, Falmouth, 1864.

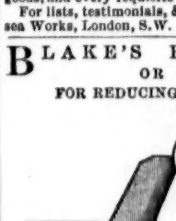
CREASE'S PNEUMATIC TUNNELLING ENGINE, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.
MR. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.
Applications to be addressed (for the present) to the patentee, MR. E. S. CREASE Tavistock, Devon. 127

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.
Warehouse, 81, Upper Ground-street, London, S. 129

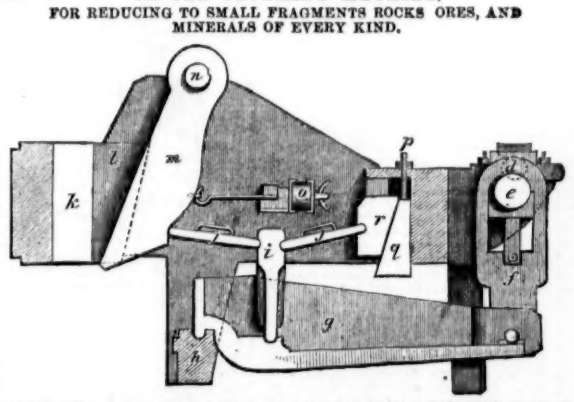
Prize Medals—International Exhibition, Class 1 and 2.

PATENT PLUMBAGO CRUCIBLES.—The CRUCIBLES manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY are the ONLY KIND for which a MEDAL has been AWARDED, and are now used exclusively by the English, Australian, and Indian Mints; the French, Russian, and other Continental Mints; the Royal Arsenals of Woolwich, Brest, and Toulon, &c.; and have been adopted by most of the large ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The GREAT SUPERIORITY of these melting pots consists in their capability of melting on an average 40 pourings of the most difficult metals, and a still greater number of those of an ordinary character, some of them having actually reached the EXTRAORDINARY NUMBER of 96 meltings. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other crucibles. In consequence of their great durability, the saving of waste is also very considerable.



The company have recently introduced CRUCIBLES SPECIALLY ADAPTED for the following purposes, viz.:—MALLEABLE IRON MELTING, the average working of which has proved to be about seven days; STEEL MELTING, which are found to save nearly 1½ ton of fuel to every ton of steel fused; and for ZINC MELTING, lasting much longer than the ordinary iron pots, and saving the great loss which arises from mixture with iron.
The Patent Plumbago Crucible Company likewise manufacture and import Clay Crucibles, Muffles, Portable Furnaces, &c., Stove Backs, all descriptions of fire-standing goods, and every requisite for the Assayer and Dentist.
For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea Works, London, S.W. 130

BLAKE'S PATENT STONE BREAKER,
OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS ORES, AND MINERALS OF EVERY KIND.



It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England.
The above section illustrates Blake's Stone Breaker, just as made the last five years and is fully protected in every part by patents.
Extract from Specification:—A short but powerful vibration is imparted to one or both of the jaws by any convenient arrangement, and combination of powerful levers, worked by a crank or eccentric on the main shaft.
LEGAL PROCEEDINGS will be taken at once against any person or persons found making, using, or vending any machine, the construction of which will constitute an infringement on the above patent. Read extracts of testimonials:—
Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.
Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably crushing the hardest stones and quartz. WM. DANIEL.
Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.
Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCASTER.
Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS
General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS
For circulars and testimonials, apply to—
H. R. MARSDEN, SOHO FOUNDRY,
MEADOW LANE, LEEDS.
Only maker in the United Kingdom. 131

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).
Published every Saturday, price 2d., or quarterly 2s. 2d.
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Published every morning, price 1d.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland. 132

NEW MEDICAL GUIDE.

DR. SMITH, who has had twenty years' practical experience in the treatment of Debility, Spermatorrhœa, Disorders of the Nervous System, &c., has published A GUIDE (138 pages) for Self-Cure. Sent to any address on receipt of two stamps. DR. SMITH may be consulted personally (or by letter) in all private and confidential cases.—Address, SMITH and Co., 8, Burton-crescent, Euston-road, London W.C. Consultations daily from Eleven to 133

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid
1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—		11 2 0.. 0 15 0	—Dec. 1864
4000	Bedford United (copper), Tavistock†	2 6 8	—		13 11 6.. 0 2 6	—Oct. 1864
1248	Boscaswell (tin, copper), St. Just	6 15 0	—		1 5 0.. 0 5 0	—May, 1864
200	Botallack (tin, copper), St. Just	91 5 0	—		477 15 0.. 3 0 0	—May, 1864
1000	Bronfloyd (lead), Cardigan [L. £15]	12 0 0	—		5 10 0.. 0 15 0	—Jan. 1865
916	Cargoll (silver-lead), Newlyn	15 5 7	38	36 37	9 5 0.. 0 15 0	—Nov. 1864
1800	Carn Brea (copper, tin), Illogan	15 0 0	—		280 10 0.. 2 0 0	—June, 1864
2880	Clifford Amalgamated (cop.), Gwen.	30 0 0	32	..30⅛ 31⅛	34 3 6.. 0 12 6	—Feb. 1865
2000	Copper Miners of England	25 0 0	—		7½ per cent.	—Half-yrly
0000	Ditto ditto (stock)	100 0 0	—		1 per cent.	—Half-yrly.
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—		14 18 0.. 1 0 0	—Jan. 1865
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—		275 10 0.. 4 0 0	—Jan. 1865
280	Derwent Mines (sil.-lead), Durham	300 0 0	—		153 0 0.. 5 0 0	—June, 1864
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	585		953 0 0..10 0 0	—Jan. 1865
358	Dolcoath (copper, tin), Camborne*	128 17 6	—		786 10 0.. 6 0 0	—Feb. 1865
512	East Basset (cop.), Redruth [S.E.]	29 10 0	32½	29 30	126 0 0.. 1 0 0	—Nov. 1864
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	14½	..13¾ 14¼	12 12 0.. 0 10 0	—Jan. 1865
400	East Darren (lead), Cardiganshire*	32 0 0	—		103 10 0.. 2 0 0	—Feb. 1865
128	East Pool (tin, copper), Pool, Illogan	24 5 0	—		369 10 0.. 4 0 0	—June, 1864
5000	East Rosewarne (cop., tin), Gwinear	2 15 0	—	2½ 2¾	0 4 6.. 0 2 0	—Feb. 1865
1906	East Wheal Lovell (tin), Wendron	2 13 6	13	.. 10 10½	1 10 0.. 0 16 0	—May, 1864
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—		65 0 0.. 1 0 0	—Jan. 1865
5000	Frank Mills (lead), Christow	3 18 6	6½	6¼ 6¾	2 0 6.. 0 6 0	—Feb. 1865
12 00	Great Laxey (lead), Isle of Man [L.]	4 0 0	18	..17¾ 18¼	1 10 0.. 0 10 0	—Dec. 1864
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	34	..32¼ 34½	5 7 0.. 0 15 0	—Dec. 1864
119	Great Work (tin), Germoe	100 0 0	—		15 0 0.. 5 0 0	—Aug. 1864
1024	Herodsfoot (id.), near Liskeard [S.E.]	8 10 0	—		31 10 0.. 1 15 0	—Feb. 1865
400	Lisburne (lead), Cardiganshire, Wales*	18 18 0	—		430 10 0.. 3 0 0	—Dec. 1864
2000	Maes-y-Safn (lead) [L]	20 0 0	—		1 0 0.. 1 0 0	—Oct. 1864
9000	Marke Valley (copper), Caradon	4 10 6	5½	5 5½	2 18 0.. 0 2 6	—Jan. 1865
3000	Minera Boundary (lead), Wrexham [L.]	1 0 0	—		0 4 0.. 0 2 0	—Nov. 1864
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	—		169 18 0.. 7 0 0	—Feb. 1865
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	—		16 19 7.. 0 12 3	—Jan. 1864
40000	Mwyndy (iron ore) [L. £4] [S.E.]	2 16 0	—		0 4 0.. 0 2 0	—April, 1864
250	Nanty Mines (lead), Montgomery	20 0 0	—		7 0 0.. 1 0 0	—June, 1864
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	2		0 11 0.. 0 1 6	—Oct. 1864
5936	North Treskerby (copper), St. Agnes	1 9 0	2½	.. 2⅛ 2⅜	0 13 0.. 0 2 6	—Feb. 1864
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—		135 0 0..12 10 0	—Jan. 1865
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	34	..32½ 34¼	75 5 0.. 1 0 0	—Nov. 1864
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	—		467 10 0.. 8 0 0	—Jan. 1865
4000	St. Day United (tin), Redruth	14 0 0	—		0 5 0.. 0 5 0	—Mar. 1864
940	St. Ives Consols (tin), St. Ives	8 0 0	—		490 10 0.. 0 10 0	—May, 1864
6000	Tincroft (cop. tin), Pool, Illogan [S.E.]	9 0 0	16	.. 15 15½	16 1 0.. 0 10 0	—Dec. 1864
1600	Torbay Hematite Iron [L. £8]	6 7 6	—		0 6 0.. 0 6 0	—Nov. 1864
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—		26 5 0.. 0 5 0	—Jan. 1865
3000	W. Chiverton, (ld.), Perranzabuloe [S.E.]	—	66	63 66	4 10 0.. 0 15 0	—Feb. 1865
256	West Damsel (copper), Gwennap	38 10 0	—		53 10 0.. 1 0 0	—Nov. 1864
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	210	..200 202½	425 0 0.. 4 0 0	—Feb. 1865
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	105	..100 102½	606 10 0.. 2 0 0	—Feb. 1865
512	Wheal Jane (silver-lead), Kea	3 10 0	9	.. 10 11	15 0 0.. 0 10 0	—Aug. 1864
4295	Wheal Kitty (tin), St. Agnes	5 4 6	—		2 6 6.. 0 3 0	—Feb. 1865
1094	Wheal Kitty (tin), Uny Lelant [S.E.]	2 0 6	—		10 2 6.. 0 7 6	—July, 1864
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]	8 0 0	—		59 7 6.. 0 10 0	—Dec. 1864
100	Wheal Mary (tin), Lelant	36 2 6	—		288 5 0.. 4 0 0	—Mar. 1864
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—		348 3 0.. 5 0 0	—May, 1864
396	Wheal Seton (tin, copper), Camborne	58 10 0	202½	..192½ 197½	191 15 0.. 4 0 0	—Feb. 1865
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	20	.. 19½ 20	50 17 6.. 0 12 6	—Dec. 1864
7000	Wicklow (copper) [L.], Wicklow	2 10 0	—		14 17 0.. 0 6 0	—Oct. 1864

[* Dividends paid every two months. † Dividends paid every three months.]

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

240	Boscean (tin), St. Just	20 10 0	—		36 10 0.. 1 0 0	—Mar. 1862
3000	Chiverton (lead), Perranzabuloe [S.E.]	6 0 0	6	5¾ 6¼	— —	— —
256	Condurrow (cop., tin), Camborne	76 10 0	59	40 50	85 0 0.. 2 0 0	—June, 1857
3450	Cook's Kitchen (copper), Illogan	18 5 9	9¼	8¼ 9	1 7 0.. 0 7 0	—May, 1862
1024	Copper Hill (copper), Redruth	12 0 0	—		2 7 6.. —	—Sept. 1862
1058	Craddock Moor (copper), St. Cleer	8 0 0	—		7 12 0.. 0 4 0	—July, 1862
4076	Devon and Cornwall (cop.), Tavistock	6 6 8	—		0 10 0.. 0 2 6	—Feb. 1859
12800	Drake Walls (tin, copper), Calstock	2 1 0	—		0 18 0.. 0 1 6	—May, 1863
3000	Dyfngwm (lead), Wales	12 6 6	—		0 17 6.. 0 2 6	—Jan. 1863
940	Fowey Consols (copper), Tywardreath	4 0 0	—		41 9 3.. 0 2 6	—June, 1860
6000	Great South Tolgus (copper), Redruth	0 14 6	2½	1⅞ 2⅛	7 18 6.. 0 5 0	—Dec. 1861
1798	Great Wheal Fortune (tin), Breage	19 12 0	5	3¼ 4	5 15 0.. 0 10 0	—Nov. 1863
10240	Gunnislake (Clitters' Adit) (copper)	0 2 0	—		0 3 0.. 0 1 6	—Mar. 1862
160	Levant (copper, tin), St. Just	2 10 0	—		1091 0 0.. 5 0 0	—May, 1860
640	Mount Pleasant (lead), Mold	4 0 0	—		18 18 1.. 0 7 6	—Aug. 1862
5000	Orsedd (lead), Flintshire	0 0 8	—		0 10 4.. 0 0 8	—Mar. 1862
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 8	—		36 19 0.. 0 2 6	—Mar. 1863
1772	Polberro (tin), St. Agnes	15 0 0	—		7 19 6.. 0 10 0	—Nov. 1863
512	Polbreen (tin), St. Agnes	8 0 0	—		1 0 0.. 1 0 0	—July, 1863
6000	Rosewall Hill and Ransom United	3 1 0	—		0 10 0.. 0 1 6	—June, 1863
5000	South Exmouth (lead), Christow	1 14 0	—		0 5 0.. 0 5 0	—Dec. 1862
512	South Tolgus (cop.), Redruth	8 0 0	—	20 25	74 10 0.. 1 0 0	—May, 1863
496	S. Wh. Frances (cop.), Illogan [S.E.]	18 18 9	25	19 20	370 13 6.. 1 0 0	—Nov. 1863
280	Spearne Moor (tin, copper), St. Just	32 17 9	30		7 0 0.. 0 10 0	—Sept. 1860
572	Trelyon Consols (tin), St. Ives	14 10 0	—		11 0 0.. 0 1 0	—Mar. 1862
1000	Trumpet Consols (tin), near Helston	11 10 0	—		— —	— —
12000	Twelve Apostles Amal. (ld.), Wrexham	1 0 0	—		4200 Vigra and Clogau (copper) [L. £5]	5 0 0
1024	Wendron Consols (tin), Wendron	20 13 10	—		8 15 0.. 1 0 0	—Jan. 1861
60	West Burton Gill (lead), Yorkshire	60 0 0	—		14 10 0.. 3 0 0	—June, 1864
1024	West Caradon (cop.), Liskeard [S.E.]	9 0 0	8½		101 1 3.. 0 10 0	—Oct. 1862
1000	Wheal Basset and Grylls (tin)	7 0 0	—		3 0 0.. 0 10 0	—Oct. 1863
1024	Wheal Friendship (copper), Devon	20 0 0	—		295 10 0.. 5 0 0	—Feb. 1861
896	Wheal Margaret (tin), Uny Lelant	11 17 6	7	6 8	76 5 0.. 1 0 0	—May, 1863
2044	Wheal Tremayne (tin), Gwinear	6 11 3	—		6 1 3.. 0 5 0	—Nov. 1863
6400	West Fowey Consols (tin and copper)	7 10 0	—		0 19 0.. 0 3 0	—May, 1862

FOREIGN DIVIDEND MINES.

20000	Australian (cop.), S. Australia [S.E.]	7 7 6	—	¾	0 1 0.. 0 1 0	—Dec. 1863
2484	Burra Burra (cop.), South Australia	5 0 0	—	61	320 0 0.. 5 0 0	—Sept. 1864
6000	Central American (silver) [L.]	5 0 0	—		4 6 8.. 0 14 10	—Dec. 1863
15000	Cape Copper Mining [L. £10] [S.E.]	7 0 0	11¾	..11¼ 11¾	0 15 0.. 0 5 0	—Sept. 1864
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	29	.. 25 27 xd.	101 0 0.. 1 0 0	—Jan. 1865
100000	Don Pedro No. Del Rey [L. £1] [S.E.]	0 12 6	⅝	⅜ ⅝	0 0 9.. 0 0 9	—Dec. 1863
70000	English and Australian	5 0 0	—		1 12 0.. 0 2 0	—Aug. 1864
15000	East Indian Coal, Calcutta [L.]	10 0 0	—		7½ per cent.	— Yearly.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	3¾	3¼ 3¾	0 14 4.. 0 3 0	—June, 1864
28000	Gen. Mining Assoc., Nova Scotia [L.]	20 0 0	24	.. 22 24	21 10 0.. 1 0 0	—June, 1864
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1	.. ¾ 1	0 12 0.. 0 1 0	—June, 1864
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0	6	.. 5 6	10 6 2.. 0 5 0	—Jan. 1865
10000	Lusitanian (Portugal) [S.E.]	2 0 0	1¾	.. 1¼ 1½	1 4 0.. 0 3 0	—Jan. 1865
9275	New Wildberg (copper)	2 0 0	—		0 10 0.. 0 10 0	—Aug. 1864
50000	Panulcillo (copper) [L. £4] [S.E.]	3 0 0	4½	4 4¼	7½ per cent.	— Yearly.
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	—		2 3 0.. 0 16 0	—Dec. 1864
97500	Port Phillip (gold), Clunes [S.E.]	1 0 0	1⅜	.. 1¼ 1¾	0 12 6.. 0 1 0	—July, 1864
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	35	.. 33 34	63 15 0.. 2 10 0	—June, 1864
43174	United Mexican (sil.), Mexico [S.E.]	28 5 0	5¼	.. 4½ 5	2 19 0.. 0 5 0	—Sept. 1864
10000	Vancouver (coal) [L. £10]	5 0 0	5⅛	.. 4¾ 5⅛	0 15 0.. 0 5 0	—Nov. 1864
50000	Victoria (London) Mining Co. [L.]	1 0 0	—		0 7 0.. 0 5 3	—Jan. 1865
20000	West Canada Mining Company [L.]	1 0 0	—		0 17 0.. 0 5 0	—Dec. 1864
45000	Yudanamutana (cop.), S. A. [L.] [S.E.]	3 0 0	2	.. 1¾ 2	0 5 0.. 0 5 0	—Aug. 1863

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Qusnangen Uni. (copp.) [L. £5]	4 10 0	—		4 5 0.. 0 15 0	—Nov. 1858
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	—		6 18 0.. 0 10 0	—Nov. 1862
10000	Gt. Barrier Land, Min., &c., N. Zc. [L. £5]	5 0 0	—		15 per cent.	—May, 1859
103815	Mariquita and New Granada [S.E.]	1 0 0	¾	⅛ ¾	0 9 6.. 0 1 6	—July, 1859

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
25000	Alamillos (lead), Spain] L. £2]	1 0 0	1¼	..1⅝ 1¾	..Sept. 1864
100000	Anglo-Brazilian (gold) [L. £1] [S.E.]	0 5 0	⅛	.. 4d. 6d.	..Dec. 1863
20000	Beariz Tin Streaming Company [L. £1]	0 17 6	—		..Oct. 1863
25000	Capula (silver), Mexico [L. £2] [S.E.]	1 0 0	¾	.. ⅛ ¾	..Feb. 1864
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		..Jan. 1859
10000	Copiapo Smelting [L.], Chili	10 0 0	—		..Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	⅝	.. ⅛	..Fully paid.
50000	East del Rey (gold), Brazil [L. £3] [S.E.]	2 0 0	1		..Feb. 1865
8000	English and Canadian Mining Company [L.]	5 0 0	—		..Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—		..Fully paid.
50000	Frontino and Boltvia (gold), New Granada [L. £2] [S.E.]	0 15 0	—		..Oct. 1864
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	—		..June, 1862
24000	Hindostan (copper), Bengal [L. £5]	3 0 0	—		..Feb. 1863
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		..Fully paid.
10000	Karbitz Colliery Company [L.]	1 0 0	—		..Fully paid.
130000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—		..Fully paid.
00000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	1	.. ⅝ ⅞	..Fully paid.
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	—		..Nov. 1862
10000	Otea (copper) New Zealand [L. £2]	0 15 0	—		..Sept. 1864
15000	Pachuca Silver Mining Company, Mexico [L. £1]	1 0 0	—		..June, 1863
6000	Peel River Land and Mineral [Limited]	100 0 0	—		..Stock.
23000	Quebrada (copper), Venezuela [L. £10]	6 10 0	—		..Sept. 1864
50000	Rosa Grande (gold), Brazil [L. £1] [S.E.]	0 5 0	—		..April, 1864
10000	San Roque (lead), Spain	5 0 0	—		..Fully paid.
60000	Santa Barbara (gold), Brazil [L. £1]	0 15 0	¾	.. ⅝ ¾	..Sept. 1864
120000	Scottish Australian Mining Company [L. £1]	0 17 6	—		..Feb. 1864
15000	South Europe Mining Company, Spain [L. £5]	5 0 0	—		..Fully paid.
12000	Teplitz Colliery Co., Bohemia [L. £5]	3 0 0	—		..June, 1863
5000	Valgodemard Mining Company [L. £20]	10 0 0	—		..Oct. 1864
80000	Vallanzasca (gold), Italy [L. £1] [S.E.]	0 10 0	2¼	.. 2 2¼	..Oct. 1864
45000	Victor Emanuel (copper), Italy [L.]	1 0 0	—		..Fully paid.
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		..Oct. 1862
12000	Wheal Ellen (copper), South Australia [L.]	5 0 0	—		..Fully paid.
81000	Worthing (copper, South Australia [L.] [S.E.]	1 0 0	¾	.. ⅝ ¾	..Fully paid.
75000	Yorke Peninsula, South Australia [L. £1]	1 0 0	⅝	.. ⅛ ¾	..Fully paid.

PROGRESSIVE MINES.

Shares	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
700	Aberdovey (sil.-lead), Merio	4 10 0	—		..Nov. 1864
1000	Alt-y-Crib (lead) [L. £5]	4 12 6	—		..July, 1864
6000	Bagtor (tin) [L.]	2 0 0	—		..Fully paid.
4000	Bedford Cons. (cop.), Tavistk.	2 10 0	—		..Nov. 1864
3200	Bedol Aur (lead), Holywell	0 14 0	—		..Dec. 1864
500	Billins (lead)	30 0 0	—		..Fully paid.
6000	Boscawen (tin), Kenwyn	2 15 0	—		..Jan. 1865
5000	Bottle Hill (tin) Plympton	1 8 6	5s.		..May, 1864
30000	Bromlow (id.), Minsterley, Salop	1 0 0	—		..Fully paid.
300	Brynford Hall (lead), Flint	30 0 0	—		..Aug. 1863
500	Bryn Gwiog (lead), Flint	9 0 0	—		..June, 1864
1832	Bryntail (lead), Llanidloes	8 15 6	—		..Dec. 1864
915	Calvadnack (tin), Wendron	26 8 6	—		..Jan. 1865
1000	Camborne Consols (copper)	18 10 0	—		..Feb. 1864
4600	Camborne Vean & Wh. Francis	10 8 4	1⅛	.. 1 1¼	..Oct. 1864
75000	CambrianConsolid. (gd.) [L. £2]	1 0 0	—		..Aug. 1862
8000	Cape Cornwall (cop.), [L. £2 10s.]	1 5 0	—		..Dec. 1864
12000	Caradon & Phœnix Cons. [L. £1]	0 10 0	—		..
914	Caradon Cons. (cop.), St. Cleer	29 6 6	—		..Sept. 1864
10000	Caradon Vale (copper)	—	—		..
6000	Carn Camborne (cop.), Cambn.	1 13 0	1⅛	..20s. 24s.	..Jan. 1865
3048	Carnyorth (tin), St. Just	4 15 0	—		..Dec. 1864
40000	Caryafort [3200 £2½ pd., 16800 £1 pd.]	—	—		..
10000	Castleward, Ireland [L.]	1 0 0	—		..Fully paid
3500	Cefn Cilcen (ld.), Flint [L. £5]	2 10 0	—		..Nov. 1864
800	Cefn Cwm Brwyno (lead)	4 0 0	—		..Sept. 1864
2500	Central Minera (lead) [L. £5]	2 14 0	—		..Jan. 1865
3000	Chiverton Moor (lead)	3 0 0	—	3⅛ 4	..Oct. 1863
4000	Clara Unit., Ponterwyd [L. £3]	2 2 0	—		..Jan. 1864
3072	Cleer's Hill (tin), St. Stephen's	0 1 4	⅜		..July, 1864
5000	Cleveland (iron), [L. £20]	8 0 0	—		..Jan. 1865
787	Clijah & Wentworth (tin, cp.)	33 10 0	—		..Aug. 1864
3000	Clowance Wood (tin) [L. £5]	3 0 0	—		..Oct. 1864
18000	Coolatrra & Bond [L.] [5800 £1 pd., 10700 16s. pd.]	—	—		..
50000	Connorree (cop., sulph.) [L.]	1 0 0	25s.	1¼	..Fully paid
6000	Cornish Clay and Tin [L.]	1 0 0	—		..Fully paid.
12000	Cornubia (tin) [L. £3] [4000 30s. pd., 8000 15s. pd.]	—	—		..
861	Crane (copper), Camborne	25 7 0	—		..Oct. 1864
30000	Crenver and Wh. Abraham [L.]	2 15 0	—		..Oct. 1864
13000	Crelake (cop.), Tavistock	2 13 0	—		..April, 1864
2500	Crowan Consols (cop.), Crowan	5 0 0	—		..Oct. 1864
8030	Crowan & Wendron (cop.) [L. £1]	0 2 6	—		..
1428	Crowlwm (lead), Llanidloes	1 11 0	—		..Dec. 1864
8000	Cuddra (cop., tin), St. Austell	4 5 0	—		..July, 1864
10000	Cwmsymlog (sil.-ld.), [L. £5]	2 0 0	—		..May, 1864
45000	Dale (lead), North Stafford	1 0 0	—		..Fully paid.
1000	Darren (lead) [L.], Cardigan	7 4 0	—		..Nov. 1864
672	Ding Dong (tin), Gulval	44 10 6	—		..Dec. 1863
20000	Dolfrwynog (gold) [L. £1]	0 15 0	—		..June, 1864
1000	Eaglebrook (lead) [L. £20]	17 19 0	—		..Feb. 1865
1000	East Basset and Grylls (tin)	2 7 6	—		..Aug. 1864
6000	E. Bottle Hill (tin), Plympton	0 4 6	—		..Aug. 1864
50000	East Cambrian (gold) [L. £1]	0 15 0	—		..Feb. 1864
8000	East Carn Brea (cop.) Redruth	3 15 0	6⅜	..6¼ 6⅛	..Feb. 1862
2000	East Chiverton (lead)	2 18 0	—		..Nov. 1864
50000	E. Clogau (gold), Merio. [L. £1]	0 6 0	—		..Mar. 1864
2048	E. Falmouth (a.-ld.), Kenwyn	5 0 6	—		..April, 1864
6000	E. Grenville (cop.), Camborne	2 12 0	3⅜	..4⅜ 4⅝	..Feb. 1865
6000	E. Gt. Work (tin), Breage [L. £5]	3 10 0	—		..Oct. 1864
4000	E. Gunnislake & S. Bedfd. (cop.)	7 19 6	⅜		..Sept. 1864
6145	East Jane (sil.-ld.), Cardinham	2 14 0	—		..Dec. 1864
6000	East Laxey (lead) [L. £3]	2 0 0	2½	.. 2 2¼	..July, 1864
1024	E. Margaret (tin), Uny Lelant	21 15 0	—		..Nov. 1864
8000	E. Polberro (tin) [L. £1] [4000 £1 pd. 4000 12s. 6d. pd.]	—	—		..Nov. 1864
3986	E. Providence (tin), Uny Lel.	3 18 3	—		..Dec. 1864
6000	East Snaefell (lead) [L. £3]	2 0 0	—		..Nov. 1864
5610	East Seton (cop.), Camborne	0 10 0	—	¼ ⅜	..Dec. 1863
256	East Tolgus (copper), Redruth	90 0 0	—		..Nov. 1864
1024	E. Treskerby (cop.), Redruth	10 13 6	3	2½ 3	..Dec. 1864
9600	East Wheal Abraham (copper)	0 5 0	—		..Aug. 1864
1190	E. Wheal Agar (cop.), St. Cleer	12 17 0	—		..Jan. 1865
1300	E. Wheal Ellen (cop.) St. Agnes	3 5 0	1⅛		..Dec. 1864
2048	East Wheal Grylls (tin, cop.)	2 15 0	—		..Jan. 1865
4000	E. Wh. Russell, Tavis. [S.E.]	9 13 6	4¾	..4½ 4⅝	..Dec. 1864
6000	East Wheal Vor (tin and cop.)	5 0 0	—	..1¾ 2	
2000	Erwfelin (lead), [L. £2]	1 0 0	—		..
6144	Esther Und. (tin), Cardingham	0 3 10	—		..Sept. 1864
6000	Fortescue Con. (sil.), Endellion	0 12 6	—		..
6000	Furze Hill Wood Cons., Buckl.	1 5 6	—		..April, 1864
1026	Garden, Morvah	5 7 9	—		..Aug. 1864
4096	Garlidna Untd. (tin), Wendron	4 15 0	⅜	½ ¾	..Jan. 1865
4000	Gawton (copper), Tavistock	2 11 6	—		..Oct. 1864
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	—		..
30000	GlasgowCaradonCon. (cp.) [L.]	1 0 0	—		..Fully paid.
1024	Godolphin (cop., tin), Crowan	0 5 0	—		..Oct. 1864
5700	Goginan (silver-lead)	12 10 0	—		..April, 1864
2000	Golch Hill (lead), Flintshire	1 4 5	—		..No call.
6144	Gonamena (copper), St. Cleer	4 13 0	2¾	..2¼ 2½	..Feb. 1865
2000	Goonzion (copper), St. Neot	1 17 6	—		..Dec. 1864
3000	Gothic (silver-lead), Cardigan	1 0 0	2½	..2⅜ 2⅝	..No call.
486	Gramb. & St. Aub. (cp.) [S.E.]	64 0 0	—		..Jan. 1865
4100	Great Brigan (cop.), Redruth	6 14 0	—		..Jan. 1865
4096	Great Caradon (cop.), St. Ive	2 16 0	1¼		..Dec. 1864
10000	Great Devon and Bedford [L.]	2 2 6	—		..Jan. 1865
3000	Gt. East Lovell (tin), Helston	1 0 0	—		..
5000	Great North Downs (copper)	4 3 0	2		..Jan. 1865
12500	Gt. No. Laxey (I. of Man) [L. £1]	0 10 0	3½		..Feb. 1865
6000	Gt. Retallack (sil.-ld., blende)	2 6 6	—		..April, 1864
6000	Great S. Chiverton (sil.-lead)	0 10 0	3½		..April, 1864
52000	Great Tregune Consols (cop.)	0 5 0	—		..
3000	Great West Chiverton (lead)	1 0 0	—		..June, 1864
3313	Great Wheal Baddern (tin)	7 17 6	—		..June, 1864
6000	Gt. Wh. Busy (cop., tin), Ken.	13 19 6	—		..Jan. 1865
3072	Gt. Wh. Grylls (tin, copper)	1 2 6	—		..Jan. 1865
10000	Gt. Wh. Metal, Breage [L. £2]	1 0 0	—		..
2500	Grit and Stapeley (lead), [L.]	10 0 0	—		..July, 1864
4000	Grylls Wheal Florence (tin)	1 0 0	1½	.. 1 1¼	..
4910	Gurlyn (cop., tin), St. Erth	3 0 3	—		..Nov. 1864
6068	Gwydyr Park Con., Llanrwst	1 7 3	—		..Feb. 1864
6000	Hallenbeagle (copper)	1 5 0	3½	.. 3 3¼	..Nov. 1864
8400	Harwood (ld.), Durham [L. £1]	0 6 6	—		..Sept. 1864
5000	Havan (ld.)., Cardigan [L. £5]	4 5 0	—		..July, 1864
7219	Hawkmoor (tin, cop.) Calstock	3 7 6	—		..Dec. 1864
10000	HazelGrove (sil.-ld.) [L. £1]	Flint 0 7 6	⅜		..
5000	Hendre (lead), Flint [L. £5]	3 10 0	—		..Jan. 1865
6000	Hingston Down (cop.), [S.E.]	5 10 6	3⅞	..3¼ 3⅜	..Dec. 1863
6000	Iliogan (tin and copper)	0 13 6	—		..Jan. 1865
5000	Kelly Bray (ld.), Callington	5 2 6	—		..June, 1864
6000	Keswick (lead), Portinscale	5 6 6	—		..Mar. 1862
96	Kilmorey (lead)	25 5 0	—		..Feb. 1864
6000	Lady Bertha (cop.) [S.E.]	3 5 0	⅝	⅜ ½	..Jan. 1865
3000	Lanivet (tin), [L. £2